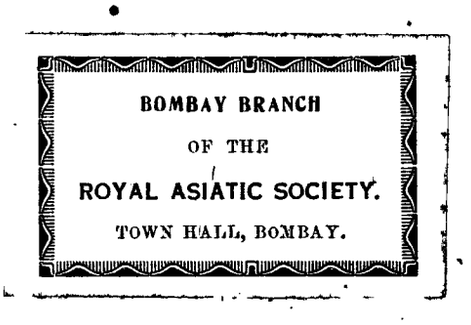
Administration Report

Punjab and its dependencies

1901-02 to 1905-06



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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

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1901-1902. to 1905-0

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SUPERINTENDENT, PUNJAB GOVERNMENT PRESS, LAHORE.

13121

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1901-1902.

PART I.

GENERAL SUMMARY.

[The "year" throughout this report is not invariably the financial year ending 31st March 1902. At the heading of each chapter a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in Chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March, in Chapter II it is the revenue year ending 30th September 1901, and in Chapters III and VI it is the calendar year ending 31st December 1901.

"Punjab" in this report does not always mean the Province as newly constituted. For instance, the historical summary in Chapter I contains the annals of the Province of the Punjab as it existed before the 9th November 1901. In Chapter II also which relates to the year ending 30th September 1901, during the whole of which the frontier districts were included in the Lieutenant-Governor's jurisdiction, "Punjab" means the old province of 31 districts. Generally where figures and statistics are given in the text the context shows whether the old or new Punjab is referred to, and, except where otherwise stated, figures relating to the calendar year 1901 or the financial year 1901-02 pertain to the Punjab as now constituted.]

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir William Mackworth Young held charge of the office of Lieutenant-Governor until March 5th, 1902, when he was succeeded by Sir Charles Montgomery Rivaz, K.C.S.I.

Constitution of North-West Frontier Province.

2. The most important administrative event of the year was the separation from the Punjab of the frontier districts now included in the North-West Frontier Province. The districts transferred—Peshāwar, Kohāt, three out of the four tahsīls of Hazāra, about two-fifths of Bannu and one-third of Dera Ismail Khan—contain between one-eighth and one-ninth of the area, and nearly one-eleventh of the population, and pay nearly one-twelfth of the land revenue of the Province as constituted before the transfer. The land revenue of the district of

Pesháwar alone is more than half of the land revenue of the Frontier Province. Generally the districts and parts of districts excluded from the Punjab are those which contain a Pathán population.

Reasons for exclusion of Pathan Districts from Punjab.

3. The reasons for the separation of the Pathán districts from the Punjab are set forth in the Parliamentary papers noted in the margin. These reasons concerned the management of political relations with the trans-frontier tribes. It having been decided that these relations should be brought under the direct control of the Government of India, the intermediate authority of the Punjab Government being eliminated, it followed, as the only practicable arrangement, that there should be placed under the same control and authority the civil administration of the areas within our border occupied by Pathán tribes, who are connected with the trans-Frontier Patháns by tribal and family ties, as well as by trade and other relations, both friendly and hostile, arising out of propinquity and inter-migration.

Cd. 495, North-West Frontier and Punjab Frontier Administration.

Number of districts in Punjab.

4. The changes in the internal arrangement of divisions and districts of the Punjab which have been necessitated by the event just mentioned are noticed in paragraph 127 of Part II. Prior to 1858 the Province consisted of 26 districts. In that year 6 districts—Delhi, Gurgaon, Karnál, Rohtak, Hissar and Sirsa—were added, raising the number to 32. In 1884 the Sirsa District was broken up and added to the Hissar and Ferozepore Districts. From 1884 until 1901 the number remained 31. The withdrawal of Hazára, Pesháwar, Kohát, Bannu and Dera Ismail Khan reduces the number to 26, but the larger portions of the two last-mentioned districts remain in the Punjab and have been constituted a new district, Miánwáli by name. Thus the Province now consists of 27 districts.

Need for additional districts.

5. But already the great changes which are being wrought by internal development within the Province are bringing into prominence the need for the creation of new administrative charges. Dealing with the question of compensating the Punjab for the loss of its frontier districts, a measure which at one time was thought necessary, the Viceroy, Lord Curzon, recorded the following observations:—

"There is another respect in which the situation has greatly changed since 1877, and which renders the question of any compensation to the Punjab Government for the proposed losses superfluous. Not merely have the administrative problems demanding the attention of the Local Government grown in number and complexity—to such an extent that complaints have frequently to be made of the degree to which the Punjab Secretariat is overworked, and that the work of the Lieutenant-Governor is probably nearly double what it was 25 years ago—but the population of the Province is rapidly increasing, and must continue to increase, not alone by the normal increment arising from natural causes, but by the reclamation of immense new tracts of habitable country. It is estimated that the great scheme of canalisation connected with the Chenab River has, during the last few years, brought under cultivation for the first time an area of over 1,000,000 acres, with a population of 700,000 persons,—figures which are expected to rise, within a few years, to 1,500,000 acres and 1,500,000 persons. The Jhelum scheme, now in course of execution, will similarly augment the area of cultivation by over 500,000 acres and should accommodate an increased population of about 400,000 persons. These two increments alone will far more than balance the loss of population which my scheme entails upon the Punjab. The Lower Bári Doáb scheme, which is next on the list, and the surveys for which are about to be commenced, will add another 500,000 acres, and the same number of population.

"Finally, it is hoped that before very long the immense Sind-Ságar scheme may be undertaken, which is intended to irrigate the staring blank space on the map on the left bank of the Indus between Kálabágh and Mooltan, and which is expected to reclaim an area of 1,750,000 acres. The realisation of this project, as of its predecessors, will add enormously not merely to the population of the Province, but to the revenue and settlement work devolving upon the local officers, and to the responsibilities of the Punjab Secretariat. They will more than compensate for what it is now proposed to take away. They will probably, before any great length of time has elapsed, demand the replenishment of the Punjab Commission by as many officers as it is now under suggestion to withdraw."

For the administration of the area brought under cultivation by the Chenab Canal it has now been found necessary to propose the creation of a new executive district. The Jhelum Canal is still under construction, and it cannot yet be said whether the colonization of the Jech Doáb will entail a similar addition to the number of administrative units. But increase of administrative work unconnected with canal development has necessitated proposals for the creation of a new district in the tract north of the Salt Range. About two years ago the Attock Tahsíl of the Ráwalpindi District was transferred to Hazára in consequence of the former large district having become quite unmanageable as a single district charge. Attock, however, did not go with Hazára to the North-West Frontier, but was reincorporated in the Ráwalpindi District. The situation thus created has led to the proposal above referred to.

Commissioners' Divisions.

6. The number of Commissioners' charges has been reduced from 6 to 5. The Peshâwar Division disappears. The Deraját Division, which has lost two tahsíls of Bannu and three tahsíls of Dera Ismail Khan, is now known as the Mooltan Division, and includes the districts of Mooltan and Jhang transferred from Lahore, which in turn takes over the districts of Gujránwála and Siálkot from Ráwalpindi. The present arrangement of divisions and districts is shown on page 44 of Part II.

CENSUS OF 1901.

Total Population.

7. The results of the Census taken on 1st March 1901 have now been published in detail in Mr. H. A. Rose's Report on the Census of the Punjab and North-West Frontier Province.

The Punjab has now a population of 24,754,737 persons, divided thus:—

British territory—	the 27 districts	20,306,252
	the Biloch trans-Frontier ...	24,087
Native States		4,424,398

The increase as compared with the population in 1891 is 6·85 per cent. for British territory and 3·78 per cent. for Native States.

District figures.

8. The effect of the colonization of the Rechna Doáb on the growth of population in the Province as a whole is that which is produced by the creation of a new food-supply which stimulates the birth-rate and minimises the retarding effects of scarcity. Colonization does not otherwise involve a special and abnormal increase of population, as all the colonists came from other districts within the Punjab and are not immigrants from without. But on the population statistics of particular districts the immigration to the Chenab Colony has produced notable results. The population of Jhang has increased by 129 per cent., and the district from being 23rd has

risen to the 4th place in order of population, the other three districts which contain over a million inhabitants being Lahore, Siálkot and Amritsar. Gujránwála has increased by 29 per cent., the colony area within its limits being less than in the case of Jhang. In Montgomery the population is practically stationary, the district having suffered by the desertion of cultivators from its riverain tracts to the Chenab Colony, while it has benefited by the extension of canal irrigation to within its borders. Siálkot, Gurdáspur and Hoshiárpur show decreases, not exceeding 3 per cent., which are entirely due to emigration to the colony, while the increase in Jullundur would have been larger but for the same cause. To the influence of the Chenab Colony must also be ascribed small decreases in the population of Jhelum and Gujrát. Not very many colonists were sent from those districts, but the demand for labour within the canal-irrigated area attracted to the colony numbers of their male population. The same cause accounts for a decrease of 18·3 per cent. in the population of the Chenab Circle of the Shahpur District. That district as a whole has a larger population than in 1891. In Mooltan an increase of 12 per cent. is mainly due to the development of the Sidhnai Canal Colony. An increase of 11 per cent. in the population of Gurgaon is somewhat surprising as the district was at one time in a depressed condition, and it did not altogether escape the famines of the past decade. The only other districts in which the Census figures call for special notice are the famine district of Hissar and the somewhat peculiarly circumstanced district of Ambala. These will be dealt with separately in referring to the effects of famine and malaria.

Native States.

Census results in Native States.

9. The population in 1901 of the Native States subject to the political control of the Punjab Government was, as noted above, 4,424,398 souls. Baháwalpur contains two-fifths of the area, but Patiála's population is over one-third of the whole. The growth of population in the Native States, as will be seen from paragraph 7, has not kept pace with that of the British Districts of the Punjab. In Patiála the increase is less than 1 per cent. It would appear that the net loss by migration of Patiála subjects to British territory has been over 3 per cent. In Jínd, where there has been an actual decrease in population, the loss through migration to British Districts amounts to 4 per cent. In the case of both Patiála and Jínd the principal loss has been in the detached south-eastern portions of the States, which suffered severely in the famines. Nábha shows an increase of over 5 per cent., and in Baháwalpur the development of the canal tract has resulted in an increase of 10 per cent. In the south-east of the Province the little State of Loháru has been exposed to the same calamities as the British District of Hissar, and has lost one-fourth of its 1891 population. Dujána has suffered a reduction of 9 per cent. Pataudi, on the other hand, has shared the fortunes of the Gurgaon District, and its population is 15 per cent. above that of 1891. The results of the Census in the remaining Native States do not call for notice.

Events of the year.

10. A somewhat full account of the affairs of the Native States is contained in Chapter I of Part II. During the minority of their rulers the two principal feudatories, Patiála and Baháwalpur, continued under the administration in the one case of a Council of Regency, and in the other of a Superintendent, Colonel L. J. H. Grey, C.S.I., who has commenced to train the young

Nawáb in administrative work. The administration in Patiála is assisted by two British Officers—Mr. T. H. S. Biddulph, whose services have been lent as Accountant-General, and Major F. P. Young, C.I.E., who is in charge of the Settlement. The Council of Regency also have the advantage of the advice and guidance of the Political Agent, Phulkián States. Patiála, Nábha and Jínd all suffered from plague towards the close of the year. In Patiála itself a somewhat serious riot marked the inhabitants' disapproval of the preventive and remedial measures which were attempted. The Nawáb of Baháwalpur and the Rája of Nábha received invitations to visit England for His Majesty's Coronation, but circumstances interfered to prevent the voyage in both cases. Small loans have been made by Government to the States of Loháru and Dujána which suffered so much from the effects of famine. The Ludhiána-Dhúri-Jakhál Railway, which has been constructed at the cost of the Jínd and Máler Kotla States, was opened for traffic on 10th April 1901. The line has cost 44 lakhs, is 79 miles in length, and during the year it has earned Rs. 2,62,909 gross and Rs. 1,18,309 net revenue.

CONDITION OF THE PEOPLE.

Material Progress Report, 1902.

11. A Report on the Material Progress of the Punjab during the decade 1891—1901 has been published early in the current year. Under the following headings in this publication will be found some interesting information concerning condition of the people:—"Movement of population; decay of some small towns"; "New grain marts established"; "Technical Education"; "Extension of Mill Industries"; "Artisans in the indigenous industries"; "Agricultural Labourers"; "Character and daily life of the Ját"; "Love of travel"; "Standard of comfort"; "Food of the agricultural population"; and "General signs of progress."

Punjab Census Report, 1902.

12. The Punjab Census Report already referred to contains much additional information bearing on the condition of the people. Mr. Rose notices a considerable increase in the number of houses, an improvement in the houses in towns where re-building has taken place, a lamentable over-crowding in the large cities where the tendency is to build additional storeys, thus shutting out light and air from the lower rooms and from the one and two storey houses. A significant fact noticed in connection with the structures of houses in villages is the gradual disappearance of the large grain receptacle, once a feature of dwelling houses in villages in all parts of the Province. Facilities of transport and high prices, it is said, are causing the practice of storing grain to be abandoned by the agriculturists, and it is now quite usual for the whole harvest to be sold, barely sufficient grain to last until the next harvest being kept, with the result that a short crop throws the cultivator completely into the hands of the *bania*. On the other hand, there is reason to believe that considerable stores of grain are kept by traders in the larger towns.

Famine in Hissar.

13. The two famines of the decade have formed the subject of special official reports, and have been noticed in the Administration Reports for the years 1897-98 and 1900-01. A brief summary of these previous accounts is given in paragraph 68 of Part II. During the year 1901-02 there was scarcity in the Hissar District only. An account of this will be found on page 64. At no time during the year did the numbers relieved exceed 0·4 per cent. of the population, which is very considerably below the normal percentage of paupers relieved in

any English, Irish or Scotch county. At the worst stage of the famine in Hissar in 1900 the numbers relieved amounted to one-fifth of the population of the District.

Effects of famine.

14. The districts in which the two famines of the decade might have been expected to produce an appreciable effect upon the population are Hissar and Rohtak. Hissar returns a population 5,711 in excess of the figures of 1891, while in Rohtak the census of 1901 gives an increase of close on 7 per cent. Two of the tahsíls of Hissar, however, Bhiwáni and Sirsa, show decreases of 3,365 and 19,935 souls respectively; but, as compared with the figures of 1881, Bhiwáni shows an increase of 20 per cent., while Sirsa has not lost ground. During the decade canal irrigation in Hissar has increased from 90,855 acres to 172,990 acres, and one effect of famine has been to cause migration from the dry to the canal irrigated tracts. But a more serious result of the calamities through which the district has passed is indicated by the small proportion of young children in the total population, there being, according to census figures, only 999 children under five per 10,000 of the population, as compared with the Provincial average of 1,340 per 10,000. But the localities in which the age constitution of the population is thus unfavourable are not those which have suffered from famine so much as those which have suffered from malaria. The excessive mortality in Hissar during the decade was directly due to malaria, which no doubt is more potent when its victims have already been enfeebled by scarcity of food.

Administration of the Land.

Proportion of Land Revenue subject to fluctuation.

15. Dealing with the year ending 30th September 1901, during the whole of which the frontier districts were included in the Punjab, the sections of the report concerned with land revenue administration contain the figures for the undivided Province. A noteworthy feature in the assessment of the land tax in this Province is the increasingly large proportion of the total demand which is subject to fluctuation according to the area or character of the crops grown. In 1892 5 per cent., or one-twentieth of the total land revenue demand, was classed as fluctuating. In 1901 the proportion had risen to between one-eighth and one-ninth, and excluding assigned revenue payable to jágírdárs and muáfídárs the proportion was just over one-eighth. If the North-West Frontier Districts were excluded the proportion would be higher. With the growth of the Chenab Canal revenue and the wider recognition in new settlements of the advantages of the fluctuating principle the proportion of total land revenue classed as fluctuating will tend to increase. Necessarily the system entails increased work on revenue establishments and requires the exercise of unremitting supervision by Revenue Officers, as any unpopularity which may attach to the system is due to the power which it places in the hands of petty officials; but such difficulties are more than counterbalanced by the advantages of an assessment adjusted to and varying with the assets of each harvest.

Collections of Fixed Land Revenue.

16. Of the total demand on account of fixed land revenue 97·1 per cent. was collected as against 79·1 in the previous year. The collections of the year were really even more favourable than the above figures indicate, as nearly half the balance shown as uncollected was nominal, having been transferred to

and collected with fluctuating land revenue in the Mooltan District. Not only were collections of the current demand favourable, but no less than 20 lakhs of arrears that had accrued during previous years of scarcity were recovered. About 3½ lakhs were remitted, the year closing with a balance of Rs. 40,38,883, much of which, however, will probably have to be remitted. The crops in respect of which the collections of the year were made were those of kharíf 1900 and rabi 1901. The former harvest was 11 per cent. above the average, while the rabi or spring harvest was the largest on record. This welcome state of prosperity has not lasted. As will be seen from paragraph 49 following, the climatic conditions of the year 1901-02 have proved most unfavourable to agriculture.

Land Alienation Act.

17. To no event of the decade does more importance attach from the point of view of the agriculturist land owners of the Province than the passing of the Alienation of Land Act by the Supreme Legislature in 1900. The Act came into force during the year under review. The nature and significance of its provisions are described in paragraph 84 of Part II. Against the evils involved in the transfer of land from the cultivating classes to money-lenders remedial measures of two classes have from time to time been proposed. Palliative legislation of the nature of the Dekhan Ryots Relief Act has been tried in Bombay: direct prohibition of alienation is the feature of the Punjab Act. The report of the Famine Commission of 1901 shows that the Bombay plan has failed. It is significant that the Commission have recommended that in that Province, where such a large proportion of the cultivators are described as mere serfs of the *sáhúkárs*, a trial should now be given to legislation on the lines of the enactment adopted for the Punjab. Experience alone can show whether the Act in this Province will fulfil the expectations of its framers. In next year's report it will be possible to describe how the operation for nearly two years of a prohibition against alienation of their land has affected the agriculturists. Meanwhile it is satisfactory to note that the introduction of the new measure has not been attended by any upheaval or excitement, and that, judging from the registration returns (see paragraph 42 following), its effect in curtailing transfers has been fully up to expectations.

Rise in the value of land.

18. The Land Alienation Act has provided a safeguard against a danger, which, though perhaps never realised, was nevertheless to be apprehended as an inevitable economic consequence of the rise in the value of agricultural land. Speculation in real estate about 15 years ago in the Australian Colonies caused widespread disaster when the bubble burst. Speculation in food-grains was a feature which marked the great rise in prices heralding the famine of 1896-97. There is always a danger of such speculation when a class of property so universally owned and so easily transferrable as agricultural land commences to command public notice by the attraction of a quickly rising market. Of all the economic facts of the decade perhaps the most remarkable is this rise in the market price of agricultural land. The sale and mortgage transactions entered in the village records indicate an enhancement of 40 per cent. within the last ten years. Tested by actual facts these statistical results seem even below the mark. In 1892 Government sold 8,783 acres on the Chenab Canal at an average of Rs. 43 per acre. In 1897 an area of 13,895 acres in the Lahore *Rakhs* was sold for an average price of Rs. 50 per acre. In 1900 an auction was held of 9,913 acres on the Chenab Canal, selected so as to include both good and bad

land, in order that the prices realized might afford a fair indication of the average market value of land. The price realized amounted to no less than Rs. 110 per acre. Previously some 5,000 acres of favourably situated land near Lyallpur had fetched Rs. 134 per acre. In all these auction sales the land was sold subject to the payment of Government revenue, local rates and canal water-rates. The remarkable enhancement of values indicated by the above figures, when multiplied by the cultivated area of the Province, implies an enormous increase in the capital resources of the land-owners. Not surprising would it be if those to whom has come such a sudden accession of resources convertible into cash or credit should be induced to yield to the temptation of high prices. The land speculator who pays a high price for his purchase must recoup himself by exacting a high rate of rent, and hence the danger of high prices for land leading to heavy rackrenting of cultivating tenants. All such dangers have, however, been averted in time by the Act of last year, and if a fall in the market value of land does occur in consequence of its operation the incident cannot be regarded as otherwise than a healthy one.

Surveys.

19. Until recently the operations of the Imperial Survey Department have been confined to topographical work in the Himalayas and Siwáliks. The services of the Department are now, however, being utilized in connection with the measures in progress for laying down fixed boundaries on rivers, especially between the Punjab and Native States.

It is now some time since the Revenue Department in this Province reached the stage of being entirely independent of professional surveyors for revenue survey work. The square system in use for village survey work is described on pages 43 and 73 of Part II. It was originally introduced by the late Colonel Wace with a view to bringing measurement work within the capacity of the village accountants, and in this respect the system has proved an unqualified success. But an advantage never originally contemplated when the system was introduced is that which arises from the adoption of the square not merely as a method of measurement but as the unit of tenure in colonization schemes. The square in the colony, as remarked in a previous report, defines the area of the holding; it is the basis of the arrangement for distribution of water; it is the groundwork of the uniform field demarcation which has been adopted, and which immensely facilitates the record of areas irrigated and cropped; it is, in fact, the feature of the colonization scheme which, more than any other, contributes to its uniformity and smoothness of working and to its popularity with the colonists.

Settlement operations completed during the last ten years.

20. Since 1892 Settlement operations have been completed in the following eleven districts—Siálkot, Shahpur, Amritsar, Lahore, Gujrát, Gujránwála, Pesháwar, Dera Gházi Khan, Montgomery, Mooltan and Jhelum—with the result of raising their gross land revenue assessment from 81 lakhs to 106 lakhs, or by 31 per cent., the percentage of increase taken varying from 21 in Siálkot and 22 in Amritsar (both densely populated districts) to 47 in Montgomery and 58 in Shahpur (both districts still in process of development). The total cost of these operations to Government has been 38 lakhs of rupees, and as the land revenue realisable by Government has been increased by 22 lakhs, they have resulted in a profit of nearly 60 per cent. per annum on the expenditure. At the same time the maps and records-of-rights of these districts have been made much more accurate than before.

Settlements now in progress.

21. Settlements are now in progress in Sirsa-Fázilka, where operations, now nearly complete, have resulted in an enhancement of revenue amounting to nearly 1¾ lakhs; in Muzaffargarh, where the anticipated increase is nearly 1¼ lakhs; in Jhang; in part of Gujránwála; and in the Attock Tahsíl of Ráwalpindi.

Government's position as landlord.

22. Government is the biggest landlord in the Province. As proprietor of forests and waste lands the State has long occupied the position of principal *land-owner*, but the relationship of *landlord* on an extensive scale over numerous cultivating tenants is one that is the outcome of recent developments. Under the old lease rules the object in view was the encouragement of the breaking up of waste land and the extension of cultivation. The ultimate transfer on reasonable terms to the tenant who had made good use of his opportunities, of ownership in the land was distinctly contemplated. With the recognition, however, of the evils of unrestricted powers of alienation it became apparent that by retaining ownership in its own hands, and withdrawing the privilege of acquisition of proprietary rights accorded by the lease rules, Government could extend to a large number of cultivators a greater degree of protection than any Land Alienation Act could confer. Accepting the situation therefore that Government must occupy the position of landlord on a very large scale, the need for a special Act to regulate such tenancies became apparent. The provisions of the Government Tenancies Act passed in 1893 to meet this need are described in paragraph 94 of Part II. The Act is being utilized for all colony tenancies.

Chenab Colony.

23. Throughout this report, throughout the reports and returns of nearly every Department, the facts presented by the development of the wonderful Chenab Colony compel notice. An area equal to that of three average-sized English counties has been transformed from a barren waste into one of the most fertile wheat-producing tracts in Northern India. A scanty aggregation of pastoral nomads has, in not much over ten years, been replaced by a population exceeding three-quarters of a million. Prospercus and contented, these people are engaged in raising grain, cotton and other agricultural products, the transport of which to the seaports and to other parts of the Province bids fair to tax to the utmost the carrying capacity of the very remunerative line of railway which the needs of the colony have called into existence. The effect of this food-supply in mitigating the severity of the famines which visited the Punjab in 1897 and 1900 is prominently noticed in the official histories of those visitations. Of the canal itself it is not purposed here to speak. The results achieved by the Irrigation Department are elsewhere noticed. It is in the achievements of revenue and administrative officers, in everything that is implied in the word *colonization*, that the elements of novelty, the features of interest, are to be found. Colonization includes the selection of suitable cultivators from numerous villages in different parts of the Province; the despatch of the selected colonists to the colony; the allocation of these immigrants in villages and in holdings, with due regard to considerations of tribe, caste, religion and family relationship; the demarcation of villages, holdings and fields; the reservation of grazing areas, the setting apart of village homesteads, and the allotment of house sites therein; the selection of village officers, and the arrangements for securing the settlement of the village menials whose crafts and labour are indispensable to the agriculturist. For another class of non-agricultural population, the traders, shop-keepers, contractors and village bankers, provision

had also to be made, not only in the villages, but by founding towns at various centres throughout the colony. At the Census the population of Lyallpur, already a Municipality, exceeded 9,000 souls, and there are several other towns whose prosperity is increasing rapidly. It may be mentioned that from sales of town sites and from rents paid for sites by non-agriculturists in towns and villages a very appreciable revenue is derived by Government. The maintenance, as the work of colonization proceeded, of records and accounts, under a system of fluctuating assessment, was no light task. The colony needed roads, schools, hospitals and dispensaries, revenue and administrative buildings. These needs have been or are being met as fast as the several Departments of Government can supply them. The cost of such works constitutes no small drain on the Provincial allotment for Public Works. But the colony is an achievement to be proud of, and its success is a matter of the deepest concern to Government and its officials.

Jhelum Canal.

24. Of the Jhelum Canal and its colony it may be hoped that a similar account will be included in the next decennial Administration Report. That canal, however, commands a smaller area of land than does the Chenab, and within the area commanded the proportion owned by Government, and therefore available for colonization, is less than in the Rechna Doáb. The work of colonization is about to commence, as on the main branch of the canal water is already available.

Horse-breeding and Camel Service Grants.

25. On the Chenab Canal areas have been allotted for stud farms to three regiments, the 12th Bengal Cavalry, the 15th Bengal Lancers and the 17th Bengal Lancers. The encouragement of horse-breeding will be made a special feature in the case of a certain number of the allotments on the Jhelum Canal. Grants to camel-owners with special service conditions have been made on the Chenab Canal and the scheme promises to be a success.

Sind-Sagar Doab.

26. On page 79 will be found an account of the Act passed this year dealing with the contingency of the construction of a canal from the Indus to irrigate the Sind-Ságar Doab. Doubts having been raised as to the feasibility of a canal in this tract, in regard especially to the sandy character of the soil, a survey was undertaken by an Irrigation Officer, whose report is now under consideration.

Tenants and rent litigation.

27. The tenancy question is not a burning one in the Punjab. Suits under the rent law are less than one-eleventh of the number in Bengal or in the United Provinces. During the year ejectment was actually carried out in respect of only 45,631 acres out of a total of 15½ millions of acres cultivated by tenants. Several reasons may be assigned for this absence of friction between landlord and tenant. In the first place so long as there is waste land to be broken up, as is the case on the new canals and in the west of the Province generally, there will always be a fairly steady demand for tenants. The demand for agricultural labourers has in many instances only been met by giving to these workers an interest in the holding, which, though generally taking the form of a temporary cultivating partnership, sometimes results in the creation of actual tenancies. Again, in the Punjab, the fact that proprietor and tenant belong for the most part to the same social class leads to a better understanding between the two. A most potent influence in adjusting the demand for rent to the ability of the tenant to pay it is the custom, so peculiar to this Province, of payment of rent in the form of a fixed share of the produce. This custom is extending. Rent in kind at rates of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{5}$ or $\frac{1}{4}$

produce is now paid on more than 8 million acres of land, as compared with 5,786,000 acres ten years ago. Automatically this system of rent payment tends to render it unnecessary to treat the Revenue Courts as rent-collecting agency, for the very operation, inherent in the system, of division of the produce, not only fixes the amount of rent payable, but is in itself payment, as in the vast majority of cases the landlord's share is made over to him at the time or to some one on his behalf. It is only when the landlord neglects to attend at the division or the tenant makes away with the produce without dividing it that resort to the courts becomes necessary. Claims of the kind are doubtless difficult and troublesome, but compared with the total number of tenancies, suits for rent are remarkably few in number.

LEGISLATION.

Work of Provincial Council.

28. A Legislative Council was granted to the Punjab in 1897. In the 4 years during which the Council has been at work eight Acts have been passed. Of these the General Clauses Act (Punjab) I of 1898 was a formal measure required to simplify the wording of the Acts of the Council. The Hoshiárpur Chos Act of 1900 is designed to provide a remedy against the destructive action of the hill torrents or *chos* of the lower Siwáliks in the Hoshiárpur District. The Punjab Limitation (Ancestral Land Alienation) Act of 1900 is a brief enactment which corrects an anomaly in the schedule of the Limitation Act. Another amending Act is the Punjab Municipal Amendment Act III of 1900, which effects certain not very important amendments shown by experience to be needed in the law relating to Municipalities. The remaining four Acts of the Local Council are referred to in Part II of this report as noted below:—

Punjab Riverain Boundaries Act I of 1899 (page 70); Punjab Descent of Jágírs Act IV of 1900 (page 36); Sind-Ságar Doáb Colonization Act I of 1902 (page 79); Punjab Steam-Boilers and Prime-Movers Act II of 1902 (page 79).

Other Legislation specially affecting the Punjab.

29. The principal legislation, specially applying to the Punjab, which emanated from the Supreme Legislative Council during the decade was the Land Alienation Act of 1900, elsewhere referred to, and an Act XXV of 1899 amending the Punjab Courts Act in the direction of curtailing the right of appeal and enhancing the powers of certain courts to deal with specified classes of cases. The Punjab Frontier Crimes Regulation was amended in 1901 (see paragraph 264).

POLICE.

State of Crime.

30. At a time when the whole subject of the organization and working of the Police in India is undergoing exhaustive examination at the hands of a special Commission it would be unwise to anticipate the verdict of that body by expressing any definite conclusions regarding Police administration and working in this Province. The subject of Police involves the subject of crime. The remark is made in the last published volume of Judicial and Administrative Statistics of British India that in proportion to population crimes of violence are more rife in the Punjab than elsewhere. The observation is made with reference to the statistics of the years 1899 and 1900. It is satisfactory to note that a very

decided abatement in serious crime marked the year 1901. In the previous year, in which the influences of famine and scarcity were undoubtedly felt, the high-water level of crime was reached. A special feature of the time was an epidemic of dakaitis throughout the Province, but especially in the central districts. Vigorous measures to meet this outbreak were undertaken, with the result that in the year 1901 dakaiti cases diminished to less than half the number of the previous year. Not only in dakaitis but also in all serious offences against property has there been a welcome abatement, which figures in the statistics at 27 per cent. In murders too there was a substantial decrease as compared with the previous five years, especially in murders committed for the sake of plunder.

Numerical weakness of Police Force.

31. The state of crime in the Province, however, even allowing for the amelioration of 1901, cannot be described as satisfactory. Whether under the influence of the unfavourable spring harvest of 1902 any recrudescence of criminal energy has manifested itself will appear when the crime of the current year is reported. District Officers writing in March of the year seemed for the most part somewhat diffident on the subject. It is not impossible that the amelioration may continue, especially if the substantial numerical strengthening of the Police Force, shortly to be expected, results in greater vigour and success in the investigation and detection of crime. Quite apart from any question connected with the Police Commission it recently became necessary to make a representation to the Government of India on the subject of the weakness of the force in this Province, and it is hoped that the necessary increase in numbers and improvement in pay will, with the sanction of the Government of India, soon be brought into effect. In the four years 1897—1900 the Police in the Punjab investigated more than twice as many cases as in the adjoining United Provinces and more than seven times as many as in Bombay, yet the number of investigating officers was only 2,784 as compared with 4,954 and 4,797 in those Provinces respectively. The total strength of the force was one-sixth less than in Bombay and over 40 per cent. below that of the United Provinces. It was not in consequence of any such comparison of statistics that a case for increasing the Police was presented to the Government of India, but because the inconveniences and drawbacks arising from the weakness of the force had otherwise compelled notice. It is significant, however, that statistics thus confirm a conclusion arrived at independently as the result of actual experience.

Criminal Justice.

Percentage of convictions.

32. Of the working of the Police the results of criminal trials are to some extent a test. If success is to be measured by the percentage of convictions the Punjab stands lowest in order of merit of any of the large Provinces. The statistics for the five years ending 1900, published in the sixth issue of Judicial and General Statistics of British India, show the percentage of convictions in the Punjab to be 34 as compared with percentages varying from 43 to 65 in the four other large Indian Provinces. Taking cognizable cases alone the percentages are—Punjab 45, Bengal 52, United Provinces 57, Madras 64, and Bombay 70. It is a subject of controversy, which is frequently presented in the Police and Judicial departmental reports, whether the difficulties in securing and maintaining conviction are due to obstacles arising from the nature of the cases and the character of the people, or to defects in Police working, or to undue leniency on

the part of Magistrates and Appellate Courts, or to the insistence on too high a standard of proof by the courts. The figures relating to criminal appeals undoubtedly mark out this Province as the one in which not only is the practice of appealing most rife, but the appellant's chances of success are greatest. Of every ten persons convicted four appeal in the Punjab, not quite three in the United Provinces, two in Bengal, and only one in Madras and Bombay. Where so many appeal it might be expected that the degree of success in the Appellate Courts would be least in this Province. But the contrary is the case, as out of every 100 appellants 35 are wholly or partially successful in the Punjab, 33 in Bengal and Madras, 24 in the United Provinces, and 23 in Bombay. These figures are based on the statistics of a five-year period, and it is noteworthy that the corresponding figures relating to civil appeals indicate the Punjab as the Province in which appellants are most successful. If it be the case that the Appellate Courts exact a very high standard of proof, their example would naturally furnish a cue to the Magistrates in the exercise of their original jurisdiction.

Other features of Punjab criminal administration.

33. Other distinctive features of the Punjab system of criminal administration are the exercise by District Magistrates of original jurisdiction in cases triable only by Courts of Session in Regulation Provinces; the trial of offenders by Councils of Elders under the Frontier Crimes Regulation, now applicable to the Dera Gházi Khan and Miánwáli Districts only; and the extensive use made of the preventive sections of the Criminal Procedure Code, the number of persons placed on security to keep the peace and for good behaviour during the quinquennial period ending 1900 being 40 per cent. of the total number of persons in British India against whom orders under those sections of the Code were passed. The large number of "offences relating to marriage" is also a feature of the Punjab criminal justice returns.

Finger prints.

34. It is not without interest to note that the system of identification by thumb and finger prints has within recent years been introduced not only by the Police for criminals, but by Courts, Treasury and Registration Officers, stamp-vendors, petition-writers, and in the numerous cases in which the identity of the party to any transaction is or may be called in question. A thumb impression is an admirable substitute for the signature of an illiterate executant of a document, and in this country illiterates are in a vast majority. The Police Training School at Phillour includes an Identification Bureau from which knowledge of the expert manipulation of the thumb-impression process is widely disseminated. Instances have already been reported of the successful detection of fraud by means of a thumb print.

PRISONS.

Jail population and health of prisoners.

35. The falling-off in crime noticed above produced its effect in reducing the number of inmates of prisons, the daily average jail population being 6 per cent. less than in 1900. The cost to Government was 13 per cent. less than in the previous year, as, in addition to the reduction of the jail population, grain was purchased at more favourable rates. The prisoners in the Múng Rasúl Jail were employed in excavating the Jhelum Canal, the value of their work being estimated at Rs. 63,047. An unfortunate outbreak of cerebro-spinal meningitis in this jail resulted in the occurrence of 47 cases and 29 deaths. Otherwise the health of prisoners in jails was satisfactory on the whole.

CIVIL JUSTICE.

Nature of civil litigation.

36. Relatively to population the Punjab is the most litigious Province in India. But nearly three-fourths of the civil suits instituted in the Punjab are uncontested. The issue of the court's process to the defendant is in the majority of cases sufficient to bring about a settlement. This step indeed takes the place of the solicitor's letter of Western civilization. Four-fifths of the suits brought in civil courts are claims for money or moveable property. The actual number of such suits in the Punjab is on an average of years nearly double the number instituted in the adjoining United Provinces, where rent litigation occupies the prominent place which in this Province is taken by suits for the recovery of debt. These debts are for the most part due from agriculturists to money-lenders; more than half the total money suits are shown in the Civil Justice Returns as being of this description. The money suits are further classified as being founded on written contract or otherwise. Not far from half the claims depend on no written contract; they are of the nature of shop-keepers' claims on book accounts. The Punjab *sáhúkár's* relation to the agriculturist is not merely that of money-lender. He is also banker, agent, broker and shop-keeper. As banker he keeps a current account with his client in which the balance is almost invariably on the debtor side. As agent he frequently settles with the village headman for the Government revenue. As broker he receives the zamíndár's grain, cotton or other agricultural produce, sometimes a cow or a goat, and converts them into cash to be credited in the account. The commission, if not charged as such, is latent in the commutation price. As shop-keeper he supplies seed grain, salt, oil and other petty requisites. When the account against the zamíndár is getting high, and the period of limitation is within sight, a balance is struck and the debtor's acknowledgment over an anna receipt stamp is taken in the *sáhúkár's* account book. But to form the basis of a claim the balance need not always be thus acknowledged. Claims founded on such accounts make up a large proportion of the 100,000 suits for money or moveables which annually figure in the column of the Civil Justice Returns for suits other than those founded on written contract. In this multifarious character of the relationship between agriculturist and village banker lies the difficulty of establishing any State-regulated supervision of loan transactions between them. Written contracts and actual cash loan transactions may be safeguarded by registration, but no system has yet been devised which would guarantee honesty and accuracy in the transaction and record of the everyday dealings of a shopkeeper-banker with his agriculturist client.

Pre-emption suits.

37. Other features in the returns of civil litigation in the Punjab are the number of pre-emption and "matrimonial" suits—in each case more than half of the total for the whole of India. The land-hunger prevalent among the rural population causes them to cling with tenacity to the custom of pre-emption, and a not inconsiderable proportion of the most keenly contested suits are claims for its enforcement. Legal intricacies have been attached to the custom in its development under our law, and an additional complication has arisen consequent upon the passing of the Land Alienation Act. Hence, as explained in paragraph 85 of Part II, it has become necessary to undertake legislation in the Provincial Council which it is hoped will place pre-emption on a more satisfactory footing.

Matrimonial suits.

38. Both offences relating to matrimony, as already stated, and matrimonial suits are features of the criminal and civil litigation in this Province. On the criminal side disputes about women constitute the most frequent cause leading to murder, no less than 184 murders in the year 1901 having been due to this cause. On the civil side suits are most often for the custody of a wife, an allegation and denial of marriage being generally the points at issue. In 1901 there was a considerable reduction in the number of matrimonial suits, which is in a large measure to be accounted for by the exclusion of the figures of the North-West Frontier Districts, where the woman question occupies a specially prominent position.

Increase in litigation in 1901.

39. Of the civil litigation of the year generally it is to be noted that there has been a considerable increase in institutions, the more remarkable because ever since 1895 the number of suits had gradually been declining. The reason generally advanced for this rush to the courts was the excellence of the spring harvest of 1901, which stimulated creditors to push their claims at a time when the existence of assets offered the hope that they would get some satisfaction. The courts generally kept pace with the inrush of work. There were some complaints of delay in the disposal of cases, but in regard to the average duration of suits the courts of this Province compare favourably with those in other provinces of British India.

Civil Appeals. Punjab Bar.

40. Allusion has been made above to the frequency with which in this Province resort to the Criminal Appellate Courts takes place, and to the comparative degree of success attained by the Punjab appellant. In civil appeals this success is no less marked. The Punjab, taking the figures for five years, is the Province in which the largest percentage of decrees are reversed or modified. The Bar in the Punjab is numerically very strong. It now numbers 1,000, having more than doubled since 1892 and more than trebled since 1882. The number of Advocates (Barristers) is more than seven times as many as there were on the rolls in the last-mentioned year. Naturally competition has reduced professional fees, and a falling off in the numbers attending the Punjab University Law College bears witness to the commencement of a reaction in the enthusiasm for a legal career.

Chief Court.

41. The Punjab Courts Act XXV of 1899 curtailing the right of appeal is beginning to produce an effect on the pending file of the Chief Court, which was reduced from 1,745 to 1,528 cases in the year under report. The state of work in the Court has been considered such as to justify the abolition of the appointment of sixth Judge, which will shortly be carried into effect.

Registration.

Effect of Land Alienation Act.

42. On page 96 some interesting information is given as to the effect of the Land Alienation Act in diminishing registration of documents. Roughly the falling-off amounts to one-half of the average registrations of previous years, and there was a corresponding reduction in the income of the Department. It is calculated that the Act in question has so far checked transfers of land to the value of over 200 lakhs per annum.

Local Self-Government.

Lord Ripon's scheme.

43. Nearly 20 years have elapsed since the introduction of Lord Ripon's scheme of Local Self-Government. District Boards and rates on land levied for

local purposes existed prior to 1883, but Act XX of that year introduced the principle of popular election of members and considerably enlarged the functions and responsibilities of the Boards. A feature of the scheme too was the creation of subordinate or Local Boards for tahsíls with powers delegated by the District Boards. This multiplication of representative institutions, it was hoped, would stimulate among the people a healthy interest in public affairs and foster the spirit of Local Self-Government.

Elective system a failure.

44. At first the elective principle met with a promising reception. Elections sometimes were a source of excitement ; canvassing and even bribing were reported to have occurred. But it was not long before it became apparent that the office of member of a Board was sought not for the sake of the influence which might be wielded in moulding the Board's policy or pushing the claims of particular schemes or local interests, but in the expectation that the personal dignity and status of the holder of the office would be enhanced. Such expectations were falsified, however, by the very numbers of the members themselves. The elected members moreover often included persons of a somewhat inferior social status, and the aristocratic instincts of the more prominent men in each district found little self-satisfaction in attaining a position which was shared by many whom they considered their inferiors. To canvas for votes was also repugnant to many. Thus it has come to pass that it is considered a greater privilege to be nominated by Government to a seat on the Board than to be elected by popular vote. The difficulties experienced in getting candidates of any description to come forward for election, and the apathy of the electorate, as evidenced by the small proportion who record their votes, are reported year after year. The facts detailed in paragraph 334 of Part II are illustrative of the present attitude of the people towards popular election.

Decay of Tahsíl Local Boards.

45. Nor have the Tahsíl Local Boards proved a success. Membership is even less an object of ambition than a seat on the District Board. Like the Rural District Boards in England, which have found themselves overshadowed by the wider authority and influence of the County Councils, these Tahsíl Boards have proved superfluous in the presence of the District Boards. Each year witnesses their abolition in one or more districts. They have disappeared from the Delhi Division and only nine districts are left in the rest of the Punjab in which they still exist.

Actual position of District Boards.

46. In other countries the existence of well-known political parties, whose proclivities and antipathies are projected into the domain of local and municipal politics, adds an element of popular interest to the proceedings of such bodies. In India this element is wanting. Factions are absent in the case of District Boards in this Province. In Municipal Committees they sometimes appear, but the cleavage generally takes place on religious rather than on political lines. In District Board meetings the discussions are strictly confined to the business in hand, and this business is almost entirely concerned with the expenditure of the funds set apart by Government for local purposes. But in the transaction of this business there is little scope for the exercise of any option or the generation of differences of opinion. The expenditure of District Boards on Education, Medical Relief and Office Establishments is largely of the nature of fixed establishment charges. The Education Code, the rules prescribing the qualifications of Medical Officers, and the Accountant-General's audit system reduce the functions of the Boards to a mere adherence to code and rule. Only

in the case of expenditure on public works would it seem that any scope for option and debate might exist, but the greater portion of the public works expenditure—six-sevenths in the year under report—is incurred on necessary and inevitable repairs and maintenance and on establishment, leaving but little for new works. Not much more than a lakh out of a total expenditure of 33 lakhs was spent on original public works in 1901-02. Questions do undoubtedly arise on which the advice and local knowledge of the members individually and collectively are of the greatest value. As consultative bodies District Boards have discharged their duties in the most satisfactory manner. But the members have as a rule no desire to undertake executive work, and are well satisfied that this should be carried out by the paid officials of the Board under the supervision of the Deputy Commissioner and his assistants. It has been necessary on occasions to overrule the proceedings of District Boards, generally on account of some act of favouritism towards an officer or servant of the Board in the matter of pay or allowances. The tendencies of these bodies if unchecked would be towards extravagance rather than economy.

Municipal Committees.

47. Much of what has been said above applies to Municipal Committees, but here the concentration of administrative activities within smaller local areas, with the circumstances of which all the Committee members are usually well acquainted, results in a more frequent interest being taken in municipal matters by the persons elected or nominated to seats on Committees than is shown by members of District and Local Boards. Moreover, in the superintendence of octroi collections, the regulation of building operations, and the direction of conservancy arrangements, there is ample scope for the employment of members in executive work. Efficiency in municipal administration, however, is in no way connected with the adoption of the elective principle. On the contrary the instances in which elections have created the greatest popular fervour and members have been elected on strictly party lines, that is to say as Hindús or Muhammadans, are those in which the want of harmony, obstructiveness and incompetence of the Committees became most marked. In Amritsar and Mooltan it proved necessary to alter the election rules so as to fix the proportion of members of each religion and divide the Municipalities into constituencies of Hindu and Muhammadan voters, each class voting for their own co-religionists only. Generally in each Municipality, especially in the smaller ones, which are in the majority, there is a consensus of opinion as to the prominent citizens who are fitted to manage the affairs of the town, and these are seldom opposed when the time for re-election comes. Thus there were only 65 contests for 202 vacancies during the year under report as noticed in paragraph 343. The incident there referred to of two candidates drawing lots for the seat on the Committee is, as the Commissioner remarks, a curious commentary on our attempts to introduce the system of representation.

Municipal Taxation.

48. Octroi continues to be the principal form of municipal taxation. This method of raising revenue for town purposes dates from the days before our rule, and is more acceptable to the mass of the urban population than the systems of direct taxation in vogue in other Provinces. The incessant insistence of Government, however, that through trade must not be taxed has led to the introduction of refund rules and bonded warehouses in all the main trade centres, and there is little reason to believe that through trade is appreciably hampered by town dues. The through trade in the main staples, grain and piece-goods, is in the hands of

the agents of European firms or shrewd native business men, who are well able to take care of their own interests and secure exemption from octroi for all merchandise not destined for local consumption.

AGRICULTURE, WEATHER AND CROPS.

Harvests of the year.

49. The spring harvest of 1901 was the largest ever reaped. So heavy was it that harvesting operations interfered to some extent with the sowings of the autumn crop. The monsoon commenced late, and though there was heavy rain at the end of July and beginning of August, there was practically a continuous break in August and September. Dry western winds in the latter month withered the crops on a large portion of the unirrigated area. In Hissar the crops failed on nearly 1½ millions of acres. A drier cold-weather season than that which followed was probably never known in the Punjab. The spring harvest of 1902 was therefore even worse than that of the preceding autumn. The total harvested area of the year was only a little over two-thirds of the area sown. On the whole, the yield is estimated as 30 per cent. below the normal. The effect of these unfavourable harvests is not apparent in the land-revenue collections of the year, which were influenced rather by the conditions produced by the excellent crops of the two previous seasons.

Cultivated and irrigated area.

50. The "cultivated" area of the Province, a term of somewhat technical meaning, has increased by about 8 per cent. during the decade, and is now about 26 millions of acres, but the area of crops varies enormously each year. The harvests of a good year may cover 10 million acres more than in a year of deficient rainfall. In the year 1901-02 the area harvested was 16¾ million acres. But the element of stability and security in the agriculture of the Province is revealed by an examination of the statistics relating to irrigation. In the year under report nearly 10 million acres received irrigation, and, as in the year 1899-1900, the area of crops matured in this way was more than half the total harvested area.

Agricultural improvement.

51. To increase the productive powers of soil by bringing water to it is the operation by which the State can most usefully promote agricultural improvement in this Province, and so long as the field for the discharge of this function is so fully engaging the attention of the administration, the efforts of the agricultural department to introduce new staples and scientific methods of cultivation must necessarily assume a minor degree of importance. In a word, the principal agricultural department is that in charge of the Chief Engineer of Canals. Nevertheless experimental cultivation of new staples, investigation of cattle and crop diseases and agricultural pests, veterinary education and veterinary treatment both of cattle and horses, and horse and mule breeding are all subjects which receive their due share of attention. Some notes of the year's work in these directions will be found on pages 103 to 106 of the report.

Prices.

52. A glance at the diagram opposite page 107 of the report will afford an indication of the course of prices of the main articles produced and consumed by the population of the Province. It is noteworthy that the intensity of famine cannot be gauged by the price barometer, for the visitation of 1900 was more severe than that of 1896-97, although prices of food-grains never reached the height which prevailed during the worst period of the former of the two famines. Prices are no longer dependent on the local agricultural conditions of the tract

affected by famine when transport facilities are equal to the demand on them. In the last famine the population of Hissar was almost entirely dependent on imported grain. Fortunately the district is exceptionally well served in the matter of railways.

FORESTS.

Character and description of forest areas.

53. Nearly 10 per cent. of the area of the Province (British Territory) is borne on the books of the Forest Department. One-third of this area is in the hills, chiefly in the Kulu Sub-Division of the Kángra District. The remaining two-thirds are situated in the plains, the area in the Mooltan District being greater than the total area of all the other districts. Two districts, Kángra (with Kulu) and Mooltan, contain about two-thirds of the area under the Forest Department. In the Native States of Chamba and Bashahr forests covering an area of 345 square miles have also been taken on lease by the Forest Department. The greater portion of the area of the so-called forests in the plains is sparsely covered brushwood jungle similar to the Bár of the Rechna Doáb before it was broken up by the Chenab colonists. The application of the Forest Act to such areas serves to safeguard the title of Government against the time when they will be required for colonization. During the year under report 57 square miles in Lahore and Mooltan were surrendered by the Forest Department for cultivation. With the development of irrigation an annual reduction in the areas of the plains forest may be expected.

Forest income.

54. The net surplus income of the Department for the year 1901-02 was Rs. 5,32,692, which constitutes a record. Of the gross income 50 per cent. is derived from timber, 30 per cent. from fuel, 12 per cent. from grazing, and 8 per cent. from miscellaneous sources. About three-fifths of the income is yielded by the hill forests. Better prices were realized generally for both timber and fuel. The Forest Department has no monopoly of the market for either timber or fuel. The supply of timber from the forests of Kashmir, Mandi and the Sutlej Hill States far exceeds that of the Government forests, and prices are thus dependent on conditions beyond the control of the Departmental Officers. For firewood the North-Western Railway is the principal customer of the Department. A resin distillery recently established in the Kángra District has proved a striking financial success and is capable of further development. In the management of the forests the principle that the interests of the surrounding population are to be carefully studied is ever kept in view. During the year under report the value of the produce removed from the forests by right-holders and free grantees was Rs. 7,50,556, or half as much as the gross income secured for Government.

TRADE AND MANUFACTURES.

Total imports and exports.

55. The value of the trade of the Province during the year was 20½ millions sterling, shared almost equally between imports and exports, for both of which the figures of the year constitute a record. There was in addition a net import of silver coin and bullion, chiefly the latter, to the value of £1,627,400. The values of the principal articles of export were—grain and pulse (639 lakhs), oil-seeds (331 lakhs), raw cotton (127 lakhs), and hides and skins (53 lakhs). The chief items in the import list were European cotton and woollen piece-goods and yarn (302 lakhs), Indian ditto (207 lakhs), sugar (238 lakhs), metals (135 lakhs), and jute goods (67 lakhs).

Grain trade.

56. In connection with the inquiries of the Indian Famine Commission of 1898 an attempt was made to estimate the annual food-grain production of the Province and the surplus available for export and storage. The total production was estimated at 5,370,518 tons and the surplus at 205,072 tons. The Famine Commissioners considered these estimates to be below the mark. The trade figures of the year under review would seem to indicate that the Commissioners were right. The net food-grain exports of the Province according to the rail- and river- borne trade returns amounted to as much as 947,000 tons; the surplus placed in storage cannot of course be ascertained, but was no doubt considerable, as the spring crop was an unusually good one. To estimate the food production of the Province on the basis of assumed average rates of outturn per acre is an operation liable to result in wide divergence from the truth when the calculation involves figures of large magnitude. As noted in paragraph 48 above, the export grain trade of the Province is largely in the hands of European firms, but the internal distribution of the food-supply provides occupation for a large class. The Census table show 339,852 persons under heading "grain-dealers."

Karachi the Punjab port.

57. Karachi is the port most favoured by grain exporters, and indeed it gets the lion's share of all the Punjab trade which is carried to and from the sea. It is the port chiefly used for the import of foreign sugar which, it is said, can be laid down more cheaply in the Punjab than Indian sugar brought from other Provinces, the Railway finding it expedient to concede favourable terms so as to freight the wagons which would otherwise return empty after discharging their loads of wheat.

Trans-frontier trade.

58. The trans-frontier trade with Afghánistán and intermediate countries is no longer registered in this Province, except at one post on the Pishin road near Fort Munro where the traffic is insignificant. There is nothing in the nature of the trade with Kashmir which differentiates it from trade between any other Native State and British India and registration posts might, as has been suggested by the Director-General of Statistics, be removed to the northern frontier of the Mahárájá's dominions.

Manufactures.

59. One woollen mill, five cotton spinning and weaving mills, eight breweries, six distilleries, ninety-three cotton ginning and pressing mills, six iron foundries and fifteen ice factories—this enumeration almost exhausts the list of large industries in the Province in the year 1902, but the encouraging feature is the circumstance that most of these industries have sprung into existence during the past decade. In 1891 there was only one cotton spinning and weaving mill and the number of cotton presses was only twelve. The absence of local coal mines and the expense of fuel will always handicap manufactures in this Province, but the rapid multiplication of cotton ginning and pressing mills shows that capitalists are ready to prosecute any industry that is found to be profitable. The existence of these cotton presses has given quite a stimulus to the production of cotton, the area of which has doubled within the decade.

Village industries.

60. On page 118 of the report will be found some notes on the organization of village industries and their position as compared with the larger industries of towns.

Joint-Stock Companies.

61. The number of Joint-Stock Companies limited by shares does not increase very rapidly, there being at the end of the year only 51 with a capital (paid-up) of Rs. 79,34,487, or a little over half a million sterling. Of these the principal concerns, with a large share of the capital, are under European management. It is not that the principle of limited liability fails to commend itself, or that there is a lack of capital in the country: the immense sums lent on the security of land negative the latter supposition. A distinguished Indian gentleman, holding high official position in the Province, thus accounts for the want of appreciation of the joint-stock system shown by the natives in this country:—

"Indians of all classes, as at present constituted, are generally incapable of acting on the co-operative principle. The fate of most Joint-Stock Companies under native management proves this. Indians are little endowed with the property of cohesion, but amply with that of repulsion, and for this reason joint concerns undertaken by them speedily come to grief. The governing body and the share-holders soon become split into factions which from disagreement proceed to dislike and hatred of each other and from apathy as regards each other's plans to opposition and obstruction of them."

PUBLIC WORKS.

Allotment of funds.

62. The Provincial Public Works Department, which is concerned with the expenditure on civil buildings, communications and miscellaneous public improvements, is the residuary legatee of Provincial finance, and is consequently the first to feel the effects of famine and scarcity when the order for retrenchment and economy has gone forth. There are certain items of recurring expenditure—those for establishment (about 7½ lakhs) and maintenance and repairs (average 15 lakhs)—which admit of little reduction, so that retrenchment has to be enforced at the expense of new works. During the past seven years the grant for new works has thus varied from 5 lakhs in 1896-97 to 18 lakhs in the year under report. What the normal requirements of the Province might be it is difficult to estimate. So constant has been the demand for funds for special and urgent works, such as the Chenab Colony administrative buildings and roads, the Dera Gházi Khan Protective Works, the Simla Water-Supply and Sewage Works, the Lahore Lunatic Asylum and others, that long lists of buildings in the Revenue, Police, Jail and other Departments, which are still awaiting the provision of funds, re-appear when the budget is annually under consideration. The expenditure on the Jhelum Canal Colony works in the future and on the new Miánwáli District head-quarters will also be a first charge on the Provincial Public Works allotment.

New buildings.

63. The principal buildings constructed during the past 10 years are the Lahore Museum, the Simla Secretariat, and the new Lunatic Asylum at Lahore.

IRRIGATION.

Canals financially profitable.

64. The sum invested in Punjab Canals is 6¾ millions sterling, on which interest at 11 per cent. was earned as the result of the year's working. The Chenab Canal, the largest of all, which has cost £1,770,361, gave a return of 18·88 per cent. on this capital. The value of the crops grown on this canal during the year is estimated at 3¼ millions sterling or nearly twice what the canal has cost. The area of these crops was 1¾ million acres, nearly one-third of the area (5½ million acres) irrigated by all the canals during the year. This great

development has taken place practically within the period of 10 years just concluded, for the canal was opened as a perennial one in April 1892. The colonization of the commanded area, which has already been described, has taken place during the same period.

Conditions affecting the working of the canals.

65. Nor can the working of the other great canals be regarded as otherwise than satisfactory. All have earned 6 per cent. or more on the capital cost. The revenue of the Sirhind and Western Jumna Canals, unlike that of canals in the west of the Province, is wont to vary with the demand for water, which is keen in a season of drought and becomes slack when ample rainfall renders the cultivator independent of irrigation. Thus a falling off in irrigation in 1901-02 was due to favourable rainfall in the Eastern Punjab. The irrigated area on the Bári Doáb shows a slow and steady upward growth, and in the year under report amounted to 856,041 acres. The efficient arrangements for the distribution of the available supply in this canal, with a view to make the water go as far as possible, have materially contributed to the extension of the irrigated area. Of all the small canals it may be said that the area of irrigation and the successful working generally depend upon the supply of water in the rivers, which in turn depends upon the quantity and distribution of the rainfall and snowfall within the several catchment areas.

Canals and Famine.

66. The periods of famine and scarcity through which the Province has passed during the decade have served to emphasise the inestimable benefits conferred by the canals. Tho most obvious of these, the protection of the food-supply, is not confined to the population resident within the canal tracts, but extends to all who feel the economic effects of the existence in the Province of food sources with surplus production. But the canal tracts, everywhere, especially the Chenab Colony, offered also a field of labour, of which the classes who first experience the pinch of famine were not slow to take advantage. To the fortunate cultivators on the canals famine thus meant cheap labour and, more profitable still, high prices for their produce, while the cost of water and the Government revenue demand remained the same.

Revenue and Finance.

Total Revenue and Expenditure of Punjab.

67. The revenue raised in the Punjab during the year amounted to 639 lakhs, or about 4¼ millions sterling. This includes revenue of the Canal and Salt Departments, but not the receipts of the Railways, Telegraph and Post Office (Imperial) Departments or funds raised for municipal purposes. Expenditure, omitting that of the Departments mentioned as well as Military expenditure, amounted to 313 lakhs, or a little over 2 millions sterling. The contribution of the Province therefore to Imperial needs, which include defence, home charges and interest on loans, was a little over 2 millions sterling.

Influences affecting the finances of the year.

68. The revenue of the year was influenced favourably by the improved agricultural conditions, which produced increases under land revenue, provincial rates and judicial stamps; and unfavourably by plague, which added 5¾ lakhs to the expenditure, and by the introduction of the Land Alienation Act, in consequence of which measure a diminished resort to registration and a falling off in the sales of non-judicial stamps is noticed in the report (paragraph 526).

69. The revenue of the Province is made up of the following items:— Details of Revenue.

	Lakhs of rupees.
Taxes on the land (land revenue, local rates and cesses) ...	301
Other Civil Departments	129
Irrigation (direct receipts)	145
Salt	64
Total ...	639

Of the 301 lakhs raised from the land, 255 lakhs are classed as land revenue and 46 lakhs as local rates, of which latter the principal are the rates raised for local expenditure and administered by District Boards and the Patwári Cess.

70. Land revenue may be regarded either as taxation on the land, or, more appropriately perhaps, as the State's customary share of the produce of the soil. But if land revenue be regarded as taxation two deductions should be made from the 255 lakhs classed under this head on account of items which in no sense can be looked on as taxation. In the first place 25½ lakhs, which are due to irrigation from Government canals, and are in fact treated by the Irrigation Department as indirect revenue earned on the capital expenditure, should be excluded. The land revenue dependent on Government canals is of course very much in excess of 25½ lakhs. This figure merely represents irrigation revenue which for administrative reasons it has been found convenient to assess and collect in the form of land revenue. Similarly it would be appropriate to exclude the income derived from State-owned lands, which, though assessed as land revenue and called by that name, is in essence not taxation, but income or profits derived from the public estate. Most of the land revenue realised on the Chenab Canal is of this description. The income derived from Government lands in the year ending 30th September 1901 was 23 lakhs. Making these two deductions the "land revenue" proper realized by Government just exceeds 206 lakhs. Land Revenue.

71. Of the 129 lakhs referred to above as the revenue of other Civil Departments the principal items are Stamps (38 lakhs), Excise and Opium (25 lakhs), Income Tax and Forests (14¼ lakhs each). The income from court-fee stamps and judicial fines (31¼ lakhs) does not, as in some other Provinces, exceed the cost of judicial establishments. In 1901 the charges for the latter amounted to 34 lakhs. The nature of the income derived from the forests has already been referred to. Other Civil Revenue.

72. The income of the Excise Department, which is derived from liquors, opium and drugs in the proportion of six-ninths, two-ninths and one-ninth respectively, has increased by about 40 per cent. within the decade. The improvement is shown under all heads. The policy of abolishing central distilleries and dissociating Government from the manufacture of spirits and liquors has answered admirably. At one time there was a central distillery in almost every tahsíl in the Province. There are now only two Government distilleries in the Punjab, one of which, in Kángra, is for a purely local supply in the hills. The production of country liquor now takes place in six large private distilleries, of which four are owned by European firms and two by Natives. The income from drugs other than opium, has doubled during the decade consequent upon the imposition of an import duty on *charas*. On *bhang*, the other form in which Excise income.

the intoxicant property of Indian hemp is used, a tax has recently been imposed, but its yield is insignificant. Opium-*smoking*, the form of consumption of the drug which is most deleterious, is not practised in this Province, and no *madak* and *chandu* shops are licensed. The incidence of Excise revenue per head of the population is less in the Punjab than in any other Province except the United Provinces.

Income Tax.

73. The realizations of this tax tend gradually to increase. During the decade the revenue which it yields has been enhanced by 25 per cent. About one-sixth of the total proceeds is realized by deduction from the salary bills of officials of Government and of local authorities. In 1901-02 there were in the Province only three public companies and two individuals with income exceeding a lakh of rupees. That the tax is not popular is evidenced by the fact that of the non-official assessees, 15,179 out of 47,982, or nearly one out of every three, petitioned against the assessment. Though the cost of collection of the tax is insignificant, the time and labour spent by Revenue Officers in assessment work and in hearing and deciding these petitions is considerable. About 60 per cent. of the assessees have an annual income of less than Rs. 1,000. It is from this class, who pay less than one-fourth of the whole tax, that the great bulk of the petitions of objection emanate.

Irrigation and Salt Revenue.

74. The financial working of the Canal Department has already been noticed. The Salt Department is not under Provincial control. The salt tax is perhaps the least onerous and most acceptable form of taxation in this country. It is rare for Government officials to hear mention made of it.

Provincial Revenues.

75. The position of the Provincial exchequer is explained on page 148 of Part II. For many years the influence both on revenue and expenditure of famine and plague, and the need for special outlay as explained in paragraph 62 above to meet various requirements which may be regarded as extraordinary, have prevented the accrual of surpluses available for increased grants for ordinary public works throughout the Province. There is now, however, ground for hope that during the remainder of the term of the financial settlement the position of the Provincial exchequer will be such as to admit of the allotment of funds for much needed buildings, roads and other public improvements.

Local Funds and Municipal Revenues.

76. Reference has already been made to the constitution and working of District Boards and Municipal Committees. The income credited to the funds administered by these bodies amounted to Rs. 33,70,000 and Rs. 47,00,000 respectively during the year, which sums were substantially in excess of the receipts of the previous year. On the one hand the local rate on land shared the recovery noticed in the case of land revenue, while more abundant imports of grain, sugar and other commodities resulted in increased octroi realizations. The District Boards of Hissar, Hoshiárpur, Jullundur and Siálkot exhausted their balances in consequence of the expenditure on famine and plague which they were called upon to incur. In the case of some Municipalities too the balances fell below the prescribed minimum owing to plague expenditure. Of Municipal expenditure nearly one-half was incurred on "Public Health and Convenience," one-sixth on General Administration including cost of collecting taxes, one-seventh on "Public Safety," *i.e.*, Police, and one-eighth on Education. As regards District Boards expenditure, taking the average for ten years, the share devoted to education was 21 per cent. as compared with an average of 20 per cent. for the District Boards of all Provinces in India. Medical expenditure was 12 per cent. in the Punjab as

against 9 per cent. for India. The share of total expenditure which, after meeting the demands of other Departments, District Boards in this Province can afford to devote to public works is less than in any other of the large Provinces. For the whole of India the District or Local Boards expenditure on public works was, taking ten years' figures, 48 per cent. of the whole ; in the Punjab it was only 32 per cent. A feature of the Local Funds expenditure in this Province is the outlay on horse and cattle fairs, horse and cattle breeding, veterinary attendance and arboriculture, the last necessarily involving considerable outlay in a climate so dry as the Punjab.

VITAL STATISTICS.

Returns of births and deaths.

77. The increase in the population as enumerated at the recent census has already been discussed. It is a remarkable fact, which testifies to the efficiency of the agency for registering births and deaths, that the increase as so ascertained differed by only 22,399 from the estimate based on the vital statistics returns. In rural tracts it is the village watchmen, whose position is described in paragraph 278 of Part II, on whom we are dependent for these returns. The Census Commissioner considers that the village watchmen's work results in fairly accurate registration.

Birth-rates.

78. The average birth-rate in 1901 was 35·4. During the quinquennium ending 1900 it was 43·2 per *mille* and in the preceding quinquennium 39 per *mille*. The highest birth-rate in the past decade was 48·4 in 1899; the lowest 35·0 in 1893 and 35·4 in 1901, the two years which followed the unhealthy seasons of 1892 and 1900.

Death-rates.

79. The variation in the death-rates from year to year is remarkable. In the two unhealthy years just mentioned, 1892 and 1900, the rate rose to 49·48 and 47·69. In no other year did it exceed 36·52. In three years of the decade it fell below 30 per *mille*. For the year 1901 the death-rate was 36·1 per *mille*.

Deaths from fever.

80. The deaths recorded as caused by fever are, roughly speaking, two-thirds of the total. In 1901 the proportion was 70 per cent. No doubt many diseases are vaguely returned as fever merely because there is an apparent rise of temperature. Years marked by a high death-rate from fever also show a high death-rate from bowel complaints. The unhealthy years of 1892 and 1900 were not as a whole characterised by excess rainfall, but there were abnormal falls during the monsoon, which caused flooding over extensive areas. In the district of Ambala there has been a decrease in ten years of 47,761, or $5\frac{1}{2}$ per cent. in the population. Malarial fevers are believed to have been the principal cause, the course of the disease corresponding almost exactly with the curve of total deaths. To malaria also is ascribed a diminution in the population in the riverain tracts of the five tahsíls lying south of the Sutlej from Rúpar to Ferozepore, and in the notoriously unhealthy Naili tracts of Karnál and Ambala. No connection can be traced between prices and rates of mortality.

Plague.

81. The Punjab has since 1897 been suffering from Bubonic Plague. The history of the visitation up to the end of the year 1901 is briefly given in paragraphs 69 and 582 of Part II. The disease is still virulent, and the difficulties and dangers arising from its existence constitute a very serious problem, and are the source of grave anxiety to the Administration. It would be out of place

here to discuss questions of plague policy or preventive measures, or to hazard any forecast as to the course of the disease. Deaths from plague had not at the time of the census reached a high figure, so that the recorded enumeration results are not appreciably affected by the existence of the disease.

MEDICAL RELIEF.

Hospitals and Dispensaries.

82. In proportion to population the number of patients treated in hospitals and dispensaries is very much larger in the Punjab than in any other Province, if Presidency town figures be excluded. The attendance at Government, local and municipal medical institutions is steadily increasing; female patients in large numbers equally with males seek relief; and there is no public department perhaps which is more generally popular. Five-sixths of the expenditure on hospitals and dispensaries is defrayed by District Boards and Municipal Committees, a proportion which is larger than in any other Province except Madras.

Pasteur Institute.

83. An institute, similar to that in Paris, called the "Pasteur Institute of India," was opened at Kasauli on the 9th August 1900. The results of the anti-rabic treatment, embodied in the first Annual Report of the Central Committee of the Institute, are very satisfactory. During the year ending 9th August 1901 there were 321 patients, who came from all parts of India, treated at the Institute. Of these 146 were Europeans and 175 natives. Up to the 21st of August 1901 there was no failure among the Europeans. Among the natives there were 3 deaths. There were 76 deaths registered from hydrophobia in the Punjab in 1901. As the beneficial results of the anti-rabic treatment are more widely known and appreciated the number of deaths from this terrible disease will gradually diminish.

Vaccination.

84. A falling off in vaccination operations in 1901-02 is ascribed to diminution in births, plague and the employment of vaccinators in plague operations.

SANITATION.

Appointment of a Sanitary Engineer.

85. The facts set forth on page 164 of this Report show that considerable attention is being paid to the improvement of sanitation and water-supply in the Punjab. The annual reports of the Sanitary Commissioner afford evidence of the good effects of such improvements. Cholera has decreased considerably in towns which have a good water-supply, while dysentery and diarrhœa have also declined. In October 1900 the appointment of Sanitary Engineer was created, an officer of the Public Works Department being deputed to hold charge of the post. Municipal Committees show every appreciation of the assistance which this officer is rendering in enabling them to formulate schemes of sanitary improvements. Want of funds is the chief obstacle to the undertaking of many such schemes, but in the circumstances satisfactory progress is being made. What has been said above on the subject of Provincial finances will explain why the Local Government has been unable to do much in the way of contributing grants-in-aid towards municipal improvements. The services of the Sanitary Engineer are being utilized in connection with the drainage and water-supply arrangements in the new towns which are springing up in the Chenab Colony.

EDUCATION.

Census results.

86. In Chapter VII of Part II will be found a full history of the introduction and progress of education in this Province, together with statistical information as to the advances made during the past five years. The Census

Returns show that in the total population only 1 in every 26 is literate, *i.e.*, able to read or write. The statistics cannot well be compared with those of the 1891 Census, when a distinction was made between literates and learners. Among Hindús and Sikhs the proportion of literates is 1 in 15; among Muhammadans it is 1 in 69. Of the total literates 1 in 10 knows English. Since 1891 the proportion of literates in English among the male population has more than doubled.

Attitude of the people towards education.

87. As regards the attitude of the people towards education, no official encouragement is necessary to bring the trading and professional classes to an appreciation of its advantages, but this appreciation proceeds chiefly from the habit of mind which regards education merely as a stepping stone to a Government appointment or a clerical career. No such advantage attends the acquisition of an education which is not carried beyond the primary stage; consequently it is in the encouragement of elementary schools that there is most need for official effort. The ordinary agriculturist is apt to consider that education spoils a ploughman. Grumbling too is sometimes heard, because the local rates which are paid by the land-owning classes are so largely devoted to the education of the *banias* who contribute so little to taxation. However, among the more thrifty agriculturists, especially the Jats, whose connection with the army brings them into closer tonch with the larger world, and whose thrifty accumulations are often employed in money-lending transactions, there is a commencing appreciation of the material advantages which education is so often found to confer, and in some districts schooling has become diffused to a remarkable extent.

Collegiate Education.

88. The increase in the number of candidates in the Punjab University Examinations has been remarkable. In 1891 there were 6 colleges with 462 students; there are now 13 colleges with 1,254 students. For all public appointments in the Province there is no lack of candidates with educational qualifications. The University has no Honours Courses for the B.A. Degree; the M.A. Examination serves, to some extent, the purposes of such a course. This is a matter which has engaged the attention of the Universities Commission. An elementary Engineering Class is maintained; the study of Biology has been introduced into two Arts Colleges, and it is proposed that the Central Training College for Teachers should be affiliated to the University. There is no institution for advanced commercial training.

The Boarding-house system for students has been remarkably successful in this Province, and Government has given land and money in several cases for the establishment of hostels.

The Punjab University is unique in having an Arts and an Oriental side, each leading up to a Master's Degree. No Indian University has anything at all resembling this form of organization. A large proportion of the University Funds goes to support the Oriental College.

Secondary Education (Boys).

89. The demand for Secondary Education in this Province requires little stimulus. Private enterprise in education, especially on the part of religious societies, is active in this direction.

The distinguishing feature of the Punjab system is the recognition of the fact that even on the Anglo-Vernacular side the first stage of education

should be through the medium of the Vernacular. To the end of the Middle School stage the Vernacular is mainly used as a medium of instruction, and in the Primary stage English is introduced only as a subject of study in the upper classes. There is among the classes who most benefit by our schools a growing tendency to regard English as an indispensable ingredient of Secondary Education, and it requires a firm restraining hand to prevent the undue conversion of Vernacular into Anglo-Vernacular Schools. In the Punjab the system of Public Examinations is in the main simpler than in other Provinces, comprising only a Primary and a Middle School Examination; in Madras there are Primary, Lower Secondary and Upper Secondary Examinations; and in the Central Provinces Lower Primary, Upper Primary, Vernacular Middle and Middle School Examinations. In this Province too the undue importance which is often apt to be attached to examinations is minimised by the permission given to School Managers, with the sanction of the Inspector of Schools, to promote boys to a higher department without regard to the examinations. The Punjab was prompt to give effect to the recommendation of the Education Commission that there should be bifurcation of studies in High Schools. As in Bengal, there are three courses of study for High Schools,—the ordinary, the scientific, and the commercial. The last of these is a genuine School Final Course, as it does not qualify for admission to an Arts College.

Primary Education (Boys).

90. In the Punjab there is much scope for the expansion of Primary Education. Numerically it is backward. The total number of pupils in receipt of Primary Education is 155,667 as compared with 150,840 five years ago. But the quality of the instruction in Primary Schools compares favourably with that of other parts of India. Thus the percentage of those "not reading printed books" is very small in this Province; in Bombay it is 40·7; in Bengal 25·3; in Madras 10·9; in the United Provinces 8·7; in the Punjab the percentage is only 1·3. Great care has been taken to improve the efficiency of the teachers and inspecting agency. No combination of teaching and inspecting duties, as in some other Provinces, is permitted, but the subordinate inspecting staff is largely recruited from among successful school masters, graduates being preferred.

The Infant and Lower Primary Examinations have been abolished as Public Examinations, and pupils have no public examination to pass until they have been five years at school; this test is to a great extent *viva voce*. There is therefore little inducement to resort to mere cramming in our Primary Schools. The progress of Primary Education has been hampered by the absence of departmental control over the budgets of Local Bodies, and it has now been decided to adopt the Bombay system, as recommended by the Government of India, whereby local budgets must be scrutinized by the Education Department. There are rules under which Local Bodies may be required by Government to devote a fixed proportion of their income to education, but the proportion so fixed has always been regarded rather as a "maximum enforcible" by Government than a necessary minimum, and if this maximum has not often in practice been enforced it is because the finances of Local Bodies have suffered so severely from famine and plague. The facts set forth in paragraph 76 above do not justify the conclusion that District Boards in the Punjab are behind hand in liberality towards education.

The education of agriculturists has received the careful attention of the Education Department. The Zamíndári Schools, corresponding to the Bombay Rural Schools, were organized in 1886, but as half-time schools they have not had the success which similar schools have had elsewhere, *e.g.*, in the Central Provinces. It appears that they cannot flourish side by side with ordinary Primary Schools, and it is now proposed to convert all Primary Schools in rural tracts into schools of the zamíndári type.

Training institutions.

91. In the matter of Training Institutions the Punjab occupies a foremost place. The training of male teachers, both for Vernacular and for Anglo-Vernacular Schools, whether Primary or Secondary, is a matter of special solicitude to the Education Department. The Central Training College is largely attended by graduates, but is not as yet affiliated to the local University. The proportion of trained teachers is higher in the Punjab than in many other parts of India, and it is now proposed to extend the course of training from one to two years and to double the number of stipendiaries. Arrangements are also being made for the opening of a Government class for training female teachers and of similar classes for European teachers.

Professional and Technical Education.

92. Professional education is represented by the Law, Medical and Veterinary Schools at Lahore, while the Mayo School of Arts may be regarded as a higher technical institute. The whole scheme of instruction in Industrial Schools has been recently revised, with the view of curtailing the time devoted to general subjects and bringing them more into line with similar schools in other parts of India. In the Punjab grants are given on easy terms to Managers of Indigenous Schools for the introduction of industrial training, *e. g.*, shoe-making, tailoring, etc. ; this is a promising experiment. In this connection the importance of drawing has been fully recognised, and every teacher under training has now to study that subject. Drawing Masters have for some years been regularly supplied by the Punjab to the neighbouring Provinces.

Female Education.

93. Female education is still in its infancy. Compared with other Provinces, the Punjab is backward, but progress is being made. There are now 26,580 girls under instruction as compared with 19,228 five years ago. It is remarkable that in several Provinces where female education shows good progress many of the girls read in boys' schools, and it has now been decided to take steps to popularize this system in the Punjab. The provision of trained teachers will remove one of the chief stumbling blocks to the advance of female education in the Province.

The Press.

Vernacular newspapers.

94. There were at the close of the year 149 newspapers on the register, the number having more than doubled within the decade. The majority of these are weekly publications, there being only two vernacular daily papers. Of these dailies, one has a circulation of 2,500 copies and the other of 200 copies only. With the exception of the weekly *Paisa Akhbár*, which is returned as having a circulation of 13,000 copies, no vernacular newspaper issues more than 3,500 copies. The majority of the vernacular newspapers have a circulation of less than 1,000 and several of them issue

less than 100 copies. The capital required for setting up and operating a vernacular printing press is quite insignificant, and no importance attaches to the increase mentioned above in the number of newspapers. Many of these publications are issued to ventilate and champion the views of a particular religious sect or society, and the polomical discussions indulged in by newspapers of this class are often conducted in offensive language. On the whole, however, the general tone of the vernacular press was better in 1901 than in the previous year.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

PHYSICAL FEATURES OF THE COUNTRY, AREA AND CLIMATE.

Introductory.

THE Punjab with its Feudatory States covers an area of 135,596 square miles, and includes a population of 24,754,737* souls, and thus contains about one-twelfth of the area and population of the Indian Empire. The population includes 12,183,345 Muhammadans, 10,344,469 Hindús and 2,102,890 Sikhs. Together with the North-West Frontier Province and Kashmir, which lies to its north, it occupies the extreme north-western corner of the Empire, and, with the exception of that province, comprises all of British India north of Sind and Rájpútána and west of the River Jumna. Thus situated, the immigrant swarms which have from time to time poured into India, and the conquering armies which have from time to time invaded it, have alike crossed the plains of the five rivers from which the Province takes its name; while its great eastern plains, which part the waters that flow on the one hand into the Indian Ocean and on the other into the Bay of Bengal, have ever formed the battlefield of Northern India. Nor is its present interest inferior to its historical importance. Stretching northwards up to and beyond the great peaks of the Central Himalayas, and embracing the Tibetan valleys of Láhul and Spiti, it includes in its eastern districts a portion of Hindustán, and on its southern border it encroaches upon the great prairies of Rájpútána, while its trans-Indus district of Dera Gházi Khan contains a race whose history and traditions are connected with Bilúchistán rather than with the Punjab. Indeed, the diversity which marks the physical and geographical aspects of the Province is no less characteristic of the races which inhabit it, of their origin, language, beliefs, customs and social structure.

Position, Shape and Size.

2. The province lies between 27° 39′ and 34° 2′ north latitude and 69° 23′ and 79° 2′ east longitude. Its shape is something between a dice-box and an hour-glass, the axes crossing at Lahore, and the longer axis running nearly east by south. The length of the longer axis is about 450, and of the shorter 160 miles; the eastern base measures some 370 and the western some 480 miles. The constriction in the middle is due to the fact that the northern boundary runs up into the hills of Chamba and Kulu in the east and of Hazára in the west, on either side of the State of Kashmir; while to the south the Province stretches down the fertile banks of the Jumna to the east, and of the Indus to the west, between which two rivers the arid deserts of Rájpútána extend northwards to within a hundred miles of Lahore.

Boundaries.

3. Along the northern border of the Punjab, Himalayan ranges divide it from Chinese Tibet and Kashmir. Between these ranges and the Indus the Hazára District of the North-West Frontier Province completes the northern boundary. On the west it is separated from the North-West Frontier Province by the Indus until that river reaches the border of the Dera Gházi Khan District which is divided from Bilúchistán by the Sulaimán Range. To its south lie Sind, Rájpútána, and the Mathra District of the United Provinces of Agra and

* This includes 24,987 for the Biloch Trans-Frontier.

Oudh ; while on the east the rivers Jumna and Tonse separate it from the same Provinces, and on the north-east a mighty Himalayan Range shuts it off from Chinese Tartary.

Political Divisions, Area, and Population.

4. The Punjab includes two classes of territory, that belonging to the British Crown, and that in the possession of the 34 Feudatory Chiefs of the Province, almost all of whom pay tribute in some form or other, and all of whom are subject, more or less, to control by the Local Government. The area and population of British territory and Native States are shown in the margin.

Territory.	Square miles.	Population.
British	97,272	20,330,339
Native States ...	38,324	4,424,398
TOTAL PROVINCE ...	135,596	24,754,737

Of the total area of the Province, some 24,000 square miles consist of mountainous or elevated tracts, and the remainder of plains. Of the 97,272 square miles included in British territory about 42,000 are cultivated, of which 14,760 are irrigated, 34,000 more including nearly 6,000 of forests are classed as culturable and would repay the labour of the husbandman were means of irrigation available, while the remainder consists of inhospitable mountain-sides or unculturable waste. The Forest Department has under its operations an area of about 8,910 square miles, but this includes forests in the Native States of Chamba and Bashahr. British territory is at present divided into 27 districts, which are grouped under five divisions, as shown in the table on page 44 following. The several tracts included in this territory are described below.

Native States.

5. The dominions of the 34 Native Chiefs vary in size and importance from the principalities of Patiála and Baháwalpur, with areas of 5,412 and 15,000 square miles, and populations of 1,596,692 and 720,877 respectively, and ruled over by Chiefs subject only to the most general supervision, to the tiny State of Dárkuti, with an area of 8 square miles and a total population of 518 souls, whose ruler is independent in little more than the name. They may be grouped under three main classes. The Hill States, lying among the Punjab Himalayas, and held by some of the most ancient Hindu Rájpút families in the world, include Chamba, Mandi, Suket, Sirmúr, and the 19 Simla States, of which last only 11 exceed a population of 12,500, while only 4 exceed an area of 250 square miles. Along the western half of the southern border of the Punjab and separated from British territory by the Sutlej lies the Muhammadan State of Baháwalpur, consisting of the left Sutlej Valley and a broad strip of the Rájpútána desert. The remaining States, including the possessions of all our great Ját Sikh feudatories, lie wholly east of Lahore, and with insignificant exceptions occupy the centre of the eastern plains of the Province.

Mountain Systems.

6. The mountain regions of the Punjab naturally fall under four separate groups. To the north-east of the Province lies the Himalayan system of the Punjab proper, with the fringing range of the Siwáliks at its foot. In the south-eastern corner of the Punjab the Arávali system sends out insignificant outliers which run across the Gurgaon and Delhi Districts and strike the Jumna at Delhi. The lower portion of the western frontier is constituted by the great Sulaimán chain ; while the north-western districts of the Province are traversed by the hill system known as the Salt Range. The first of these four groups is separated by Kashmir territory, which, from the Himalayan State of Chamba on the east to the Jhelum on the west, stretches down to and includes the foot of the mountain ranges.

The Sulaimans.

7. The Sulaimán mountains run almost due north and south along the western border of the Dera Gházi Khan District for about 200 miles. They consist of several parallel ranges of barren mountains, between which lie valleys that are fertile only by comparison, and are inhabited by Bilúch tribes under

the political jurisdiction of the Deputy Commissioner of Dera Gházi Khan and mostly connected in organization with the Bilúch Chiefs of that district.

The Aravalis.

8. The Arávalís, which run through the Gurgaon and the south of the Delhi District, consist of low ranges of insignificant hills covered with brushwood, and are interesting chiefly from a geological point of view, as, with the exception of the isolated peak of Kirána in Jhang, they form the northernmost extremity of the peninsular rock system, so distinct from the later formations of the Himalayas.

The Himalayan System.

9. The mountain system of the Himalayas,* so far as it concerns the Punjab, consists primarily of three great ranges running in a generally north-westerly direction from the head-waters of the Sutlej to the Indus; the Western Himalayas or Zanskár or Bára Lácha Range, the mid-Himalayas or Pír Panjál Range, and the outer or sub-Himalayas. From these three great ranges spring numerous minor ranges as ribs from a backbone, the whole forming a confused system of mountain chains and valleys, the breadth of which is some 90 miles at its eastern extremity, from Láhul to the Siwáliks of Hoshiárpur, and some 150 miles measured at its western extremity across Kashmir.

The Western Himalayas.

10. The Western Himalayas or Zanskár or Bára Lácha Range separates the valley of the Upper Indus which lies to its north from the mountain basins of the five Punjab rivers. It runs from the sources of the Sutlej along the northern borders of Kanáwar in Bashahr, Spiti, Láhul, Pangi (in Chamba) and the Kashmir Valley, till pierced by the Indus at the base of the mighty Nanga Parbat. Thence it passes on to join the Pámir and Hindu Kush near the sources of the Kuner and Gilgit Rivers. It separates the Aryans of India from the Botís of Tibet, and the cold, dry, treeless steppes of Central Asia from the luxuriant humidity of India. The average height is 19,000 feet, or greater than that of the Andes; the average height of its peaks is 20,770 feet, and that of its passes 15,700 feet. Its snow-line lies at 18,500 feet on its southern and at 19,000 feet on its northern face.

The mid-Himalayas.

11. The mid-Himalayas or Pír Panjál Range divides the valleys of Spiti, Láhul and Kashmir on the north from that of Kulu, Plách and Chamba on the south, and terminates on the Indus at the Hazára border in the celebrated peak of Mahában, though the Swát Range may perhaps be considered its trans-Indus continuation. Its general direction is north-west, and it is divided into three well-marked sections by the great rivers which pierce its chain. The easternmost or Bashahr Range is an offshoot of the Western Himalayas, and extends for a distance of 60 miles from lofty Jamnotri to the Sutlej below Ghatul. Beyond the Sutlej it is continued by the Láhul Range, which runs for 160 miles to the great southward sweep of the Chenab in Kishtwár (Kashmir). Thence the Pír Panjál runs for some 180 miles to the great southward sweep of the Jhelum at Muzaffarabad, and across the Jhelum and Hazára Districts to the Indus at Darband. The average height of its peaks is 19,000, of its passes 15,520, and of the chain 17,000 feet in the Bashahr and Láhul sections. The Pír Panjál Range is probably some 5,000 feet lower. The snow-line is at 16,000 feet on the northern, and 17,000 feet on the southern, face.

The Outer Himalayas.

12. The outer or sub-Himalayas stretch in a north-westerly direction, through Suket and Mandi and between Kángra and Chamba, for a distance of some 300 miles, and terminate on the Indus at the Hazára border in the well-known peak of Gandgarh. Starting from the bend of the Beas at Mandi, they are pierced by the Ravi, Chenab, Punch and Jhelum Rivers, which divide them into five distinct sections. The easternmost section is the precipitous range of the Dhaola Dhár or White Mountains, which, lying between the Beas and the Ravi, form the natural boundary between Kulu and Mandi and between Kángra and Chamba, and is the highest portion of the range, reaching an average of 15,000 feet. Its length is some 80 miles, and it includes the hill stations of

* This account of the three great Himalayan ranges is mainly condensed from General Cunningham's "Ladákh."

Dharmsála and Dalhousie. The second portion, some 55 miles in length, lies between the Ravi and Chenab, and shuts in Chamba and Badrawár (Kashmir) to the south. Its average height may be put at 12,000 feet. The central portion of the range is known as the Ratan Panjál; it stretches from the Chenab to the southern bend of the Punch River, for a distance of some 80 miles, and ranges in height between 7,700 and 11,000 feet. The fourth section, some 25 miles in length, runs from the Punch River to Dhangali, the ancient Gakkhar capital on the Jhelum. The westernmost division of the range runs for 70 miles between the Jhelum and the Indus, and attains a height of above 17,000 feet. The outer Himalayas have no perpetual snow.

The Siwaliks.

13. The Siwáliks are an insignificant range of low hills which, rising abruptly from the plains, skirt the foot of the Himalayas from the Ganges to the Beas. At the widest parts, as they approach the Sutlej, they are some 10 miles broad. Between them and the Himalayas proper lie a series of fertile valleys known as *Dúns;* and the hills themselves are clothed with forest timber of some value, save at their western extremity, where they degenerate into little more than sand-hills.

The Salt Range.

14. The main chain of the Salt Range commences in the hill of Chel, 3,701 feet above the sea, which is formed by the convergence of three spurs cropping up from the Jhelum River, and divided from the Himalayan outliers only by the intervening river valley. The most northern of these spurs rises abruptly from the river bank at Sultánpur, and runs nearly parallel with the Jhelum at a distance of 25 miles, till it joins the main chain after a course of 40 miles. It bears the local name of the Nili Hills. The second spur, known as the Rotás Range, runs half-way between the Nili Hills and the river, parallel with both. It contains the famous fort of Rotás, and the hill of Tilla, the sanitarium of Jhelum District, with an elevation of 3,242 feet above sea-level. The third or Pabbi spur rises south of the Jhelum River, dips for a while on approaching the river valley, and rises once more on the northern bank, till it finally unites with the two other chains in the central peak of Chel. Thence the united range runs westward in two parallel ridges, till it culminates in the mountain of Sakeswar, in the Shahpur District, which has an elevation of 5,010 feet above sea-level. Between these lines of hills, and topped by their highest summits, lies an elevated and fertile table-land, picturesquely intersected by ravines and peaks. In its midst nestles the beautiful lake of Kallar Kahár. The streams which take their rise in the table-land, however, become brackish before reaching the lowlands.

The River System.

15. The Himalayas which stretch from Northern Punjab and Kashmir far away into Tibet give birth to seven great rivers, which, after pursuing their courses far, in some cases, many hundreds of miles among snow-clad mountain ranges, debouch on to the plain country, and traverse the Punjab in a generally southerly direction on their way to the ocean. The hills once fairly left behind, their fall seldom exceeds two feet in the mile, and their course is in consequence exceedingly inconstant, varying, often considerably, from year to year. Thus in the process of time each stream has cut for itself a wide riverain lying well below the level of the surrounding plains, the banks of which mark on either side the extreme limits of the river's excursions. Within these lowlands, over the whole of which the stream has at some time or other flowed, the river winds its way in a narrow and ever-shifting channel. In the winter the stream is comparatively small; but as the mountain snows melt under the approach of the Indian summer, the waters rise and overflow the surrounding country, often to a distance of several miles on either bank. As the cold returns at the close of the rainy season, the waters recede, leaving wide expanses of fertile loam or less fertile sand, moist for the hand of the cultivator.

The Jumna.

16. The Jumna and its tributary, the Tonse, form the greater portion of the eastern boundary of the Province, along which they flow almost due north and south for a distance of some 220 miles.* A few miles to the west runs the

* All distances given in this and the next seven paragraphs are measured from point to point, and not along the course of the stream.

water-shed between the Indian Ocean and the Bay of Bengal, which forms the backbone of extra-peninsular India.

17. West again of this line lies a peculiar area of closed drainage intermediate between the basins of the Jumna and Sutlej, into which the Márkanda, Suraswati, Ghaggar and other hill streams pour their waters; while the last-named river affords the only outlet, and passing away westwards into Rájpútána, itself gradually dwindles and finally disappears in the arid wastes of that province. All to the west of this area, as well as the whole mountain region of the Punjab, belong to the Indus system. **The Area of Closed Drainage.**

18. The Indus after skirting the Hazára District of the North-West Frontier Province flows along the border of the Ráwalpindi District, cuts off the Pesháwar and Kohát Districts of that Province from the Punjab, pierces the Salt Range at Kálábágh, and thence traverses the Miánwáli and Dera Gházi Khan Districts at a distance of from 15 to 30 miles from, and parallel with, the Sulaimáns. It receives no affluents of any importance on its right bank, for the scanty rainfall of the Sulaimáns is insufficient to feed anything more than hill torrents of intermittent flow. From the east, however, it receives the combined waters of the Jhelum, Chenab, Ravi, Beas and Sutlej, the five great rivers which give the Punjab (*panj áb*, or "five waters") its name, and which traverse its plains, lying in that order from west to east. **The Indus.**

19. The Sutlej, rising in Chinese Tartary, enters the Province in the State of Bashahr, and, flowing through the territories of our hill feudatories, debouches on the plains at Rúpar in the Ambala District. Thence it flows due west for 120 miles as far as Ferozepore, where it receives the waters of the Beas, and thence south-west for some 270 more miles, till, joined by the combined Ravi, Chenab and Jhelum, it pours the united waters of the five rivers into the Indus opposite Mithankot, some 70 miles above the Sind border. **The Sutlej.**

20. The Chenab takes at once its name and its origin from the twin streams of the Chandra and Bhága, which drain the Himalayan Valley of Láhul. Traversing Chamba and south-eastern Kashmir, with a generally western course, it re-enters the Punjab at the middle point of its northern border, just below the town of Jammu. Thence it runs, first to the south-west, but gradually changing to the south, for some 300 miles to join the Sutlej about 40 miles above the confluence of the latter with the Indus, receiving the waters of the Jhelum at about the midway point of its course in the plains, and those of the Ravi some 50 miles lower down. **The Chenab.**

21. Between the Sutlej and Chenab flow the smaller streams of the Beas and the Ravi. The former rises in the Kulu Himalayas, runs westwards through Mandi and Kángra, enters the plains at the north-western extremity of the Hoshiárpur District, and joins the Sutlej after a south-western course of some 70 miles. The latter rises in Chamba, enters the plains some 15 miles west of the Beas, and flows 260 miles to the south-west, to join the Chenab about 90 miles above the confluence of that river with the Sutlej. **The Beas and Ravi.**

22. Finally, the Jhelum, rising in Kashmir, flows due south along the eastern boundary of the Ráwalpindi and Jhelum Districts for a distance of 100 miles, and enters that district at the town of Jhelum, whence it flows south-west for 100 miles as far as Shahpur, and then 70 miles further in a southerly direction till it joins the Chenab 150 miles above its confluence with the Sutlej. **The Jhelum.**

23. Thus, if the northern edge of the Punjab plains be produced across the Salt Range tract to strike the Indus at Attock, the points at which the rivers cut that line are as shown in the margin. But while the Jumna and Indus, which lie to the extreme east and west, run almost due south, the five rivers which flow between them all tend to the south-west to join the Indus before it leaves the Province; so that by the time they **The Distribution of the Punjab Rivers.**

	Mile.
Jumna to Sutlej, 80 miles	80
Sutlej to Beas, 75 „	155
Beas to Ravi, 20 „	175
Ravi to Chenab, 50 „	225
Chenab to Jhelum, 35 „	260
Jhelum to Indus, 110 „	370

reach the longer axis of the Punjab, which runs through Lahore from near the eastern extremity of the line just discussed, the Sutlej has left the Jumna, has approached the Ravi, and has absorbed the Beas altogether, while all five rivers have approached nearer to the Indus; and the distances measured as before are shown in the margin. And of the southern border of the Province, the whole eastern half, some 275 miles in length, which forms the southern base of the area of closed drainage already described, is unbroken by any river worthy of the name.

	Mile.
Jumna to Sutlej, 170 miles	170
Sutlej to Ravi, 40 „	210
Ravi to Chenab, 70 „	280
Chenab to Jhelum, 50 „	330
Jhelum to Indus, 60 „	390

The Punjab Plains.

24. South of the great Himalayas stretch the great plains which constitute by far the larger portion of the Province. If we except the Himalayan and Salt Range tracts, the Punjab presents, from the Jumna, in the east to the Sulaimáns in the west, one vast level, unbroken save by the wide eroded channels within which the great rivers ever shift their beds, by the insignificant spurs of the Arávali Mountain system in the south-eastern corner of the Province, and by the low hills of Chiniot and Kirána in Jhang. From the water-shed of the Jumna the slope is uniformly westwards towards the Indus basin, broken locally by the successive steps which part the catchment-basins of the Punjab rivers, and which, often almost imperceptible to the eye, always lie close to the right bank of the channel. From the foot of the hills the plain country slopes southwards till it approaches the southern border of the Province, when it begins to rise again towards the peninsular area. The lowest contour runs from Delhi west by north, a little south of Rohtak and Hissar, and bifurcates between Hissar and Sirsa, the northern branch going north-north-west along the Himalayan spill to the south of Lahore, while the southern branch curves to the south-west along the Arávali spill to the west of Bikaner. The combined result of these two slopes is a fall in a south-westerly direction, at right angles to the mountain ranges and parallel with the general course of the rivers; but the fall is exceedingly gentle, seldom exceeding two or three feet in the mile.

General Character of the Soil.

25. The whole of these vast plains are of alluvial formation. Stones are unknown save at the immediate foot of the hills; micaceous river sand is to be found everywhere at varying depths; and the only mineral is nodular accretions of limestone (*kankar*) which are produced *in situ*. The soil is a singularly uniform loam; true clay is almost unknown; and the quality is determined chiefly by the greater or smaller proportion of sand present. In the local hollows and drainage lines the constant deposit of argillaceous particles has produced a stiff tenacious soil, singularly adapted to rice cultivation; while in the beds of the great rivers, and on the wind-fretted water-sheds, pure sand is commonly found. The great *thal* which lies between the Jhelum-Chenab and the Indus, bordered on the south by the Rájpútána desert, and on either side by the two largest of our rivers, consists of a series of rolling sand-hills formed by the wind, which run parallel to the great break-water of the Salt Range, and are separated by valleys in which the original surface is exposed. In parts, and especially where local conditions raise the level of the water-table, the salts natural to the soil have been concentrated on the surface by continuous evaporation, and have covered the ground, often for miles together, with a saline efflorescence known as *reh*, which is fatal to vegetable life. But where neither *reh* nor sand is present, the soil is uniformly fertile if only the rainfall be sufficient or means of irrigation be available. Throughout the greater part of the western plains of the Punjab, however, the insufficiency of rainfall is a permanent condition, and until recently the uniform aspect of the country was that of wide steppes of intrinsically fertile soil, locally known as *bárs*, useful only as grazing-grounds for herds of camels and cattle. The construction of canals in the *bár* and *thal* tracts will, however, entirely change the face of this part of the country. The depth of water from the surface varies greatly. Throughout the broad riverains and immediately below the hills it ranges between 10 and 30 feet; but the depth increases with the distance from the rivers and the hills, and in many parts of the Province rises

as high as 150 to 200 feet, while the water, when reached, is too often so brackish as to be harmful to both animal and vegetable life. The natural divisions of the Punjab plains are more particularly described below.

26. The Punjab enjoys two well-marked seasons of rainfall,—the monsoon season, which brings it by far the greater portion of its annual supply, which lasts from the middle of June to the middle or end of September, and upon which the autumn crops and spring sowings depend; and the winter rains, which fall early in January, and though sometimes insignificant in amount affect very materially the prospects of the spring harvest. The table in the margin shows the most recent statistics of rainfall for certain selected stations, the figures being corrected averages of all past records which can be depended upon. Rainfall.

Station.	Normal annual rainfall.	Tract.
Dalhousie	78·52	Himalayan tract.
Dharmsála	121·57	
Kángra	73·59	
Simla	63·59	
Siálkot	31·75	Submontane zone.
Gurdáspur	34·30	
Hoshiárpur	35·68	
Ambala	32·96	
Karnál	30·11	Jumna valley.
Delhi	28·09	
Gurgaon	25·86	
Rohtak	20·62	East Southern border.
Hissar	15·78	
Sirsa	14·43	
Ferozepore	18·00	North Central Districts.
Lahore	20·10	
Amritsar	23·96	
Gujránwála	23·29	
Jhang	9·97	Western Plains.
Montgomery	10·25	
Khusháb	14·12	
Mooltan	7·30	
Muzaffargarh	5·81	
Dera Gházi Khan	6·19	
Dera Ismail Khan	8·51	
Murree	55·85	Salt Range tract.
Ráwalpindi	33·98	
Jhelum	23·87	

27. The rainfall is necessarily heavier in the Himalayas than in any other portion of the Province, the vapour-laden air from the south-east and south precipitating its water as it rises to top the great barrier which it finds across its path. The highest average of the Province is the 121·57 inches enjoyed by Dharmsála, and the figures probably nowhere fall below 55 inches (Murree) within the Punjab Himalayas. Excepting the alpine regions, the rainfall is greatest in the east of the Province, as the Bombay monsoon is exhausted of its vapour in its passage over the great plains of Sind and Rájpútána, while the west winds from Bilúchistán pass over an arid tract and leave such moisture as they may have collected on the western slopes of the Sulaimáns, so that the Punjab depends for its rain very largely upon the south-east winds from the Bay of Bengal. Effect of Monsoons.

28. Thus we find that in the plain country the rainfall decreases rapidly as the distance from the hills increases, and markedly also, though less rapidly, the further we go west. The submontane zone, presently to be described, which skirts the foot of the mountains, enjoys an annual fall ranging from 32 to 36 inches, while in the strip of country lying along the right bank of the Jumna the average lies between 26 and 30 inches. But in no other portion of the Province except in the portions of the Salt Range tract immediately under the hills are these figures approached. In the Eastern Plains the annual fall may be said, roughly speaking, to decrease by about one inch for every 10 miles of distance from the hills, and ranges along their southern border between 20 inches in the east (Rohtak) and 14 in the west (Sirsa). But directly we cross the meridian of Lahore and enter the great steppes of the Western Plains, the figures fall to some 8 or 10 inches, while in the neighbourhood of Mooltan, in the extreme south-west of the Province, the yearly average is only 5 to 6 Local Distribution of Rainfall.

inches. The great rivers have a slight local effect in increasing the amount of precipitation in their immediate neighbourhood; and this influence is of more importance than would appear from the bare statistics, as the addition thus made to the total annual fall is distributed in the form of more or less periodical showers which often bring timely moisture to the crops.

Temperature and Climate.

29. Owing to its geographical position, to its scanty rainfall and cloudless skies, and perhaps to the wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than does that of any other part of India. The extreme heat of the summer months begins to moderate about the middle of September; and from the beginning of October, though the days are still hot, the nights are fairly cool. From that time the temperature sinks lower and lower, till the minimum is reached with the fall of the winter rains in the early part of January, when sharp frosts are common, and water exposed at night with due precautions is frozen in all parts of the Province. The temperature then rises again slowly but steadily till the end of March. With April the hot weather proper may be said to begin. For the next three months the Punjab acts as the exhaust-chamber of India, and creates that monsoon of which it enjoys so small a share.

Hot Weather and Rains.

30. The great plains bake throughout the long summer days, the heated air rises, as it does so the barometer falls fast, the wind rushes in from the area of greatest pressure to the west and south-west to supply the partial void, and dust-laden hot winds sweep with unbroken violence over the open plains, while the dancing air seems to blaze with the glare reflected from the ground. It is said that the fierceness of this heat has a beneficial effect in disintegrating and preparing for tillage the surface of the fallow fields, similar to that exercised by frost in more frigid climates. Towards the end of June the wind changes, at least in the east of the Province; the vapour-laden monsoon travelling up the Ganges Valley approaches our border; the sky grows heavy with clouds, and the heat becomes stifling almost beyond endurance, till the first burst of the welcome rains relieves the tension. The succeeding three months constitute the rainy season; the heat of July is hardly less intense than that of June, but the air is moist, while from the middle of August the temperature gradually falls, and it again becomes possible to believe in the existence of winter.

Climate in the Hills.

31. Within the hills the seasons and their changes are very similar, though of course the heat is much more moderate and the cold much more severe. From the middle of December to the middle of January snow-storms are heavy and frequent throughout the Himalayas proper; while even in the height of summer the thermometer seldom rises above 90° in the shade.

Recent temperature Statistics.

32. The following figures show some details of temperature for the last five years:—

Station.	Highest maximum in					Lowest minimum in				
	1897	1898.	1899.	1900.	1901.	1897.	1898.	1899.	1900.	1901.
Delhi	114·7	112·2	110·7	111·2	114·2	37·9	31·9	39·4	42·2	42·2
Sirsa	118·3	115·3	115·8	117·3	116·8	36·2	32·2	40·5	33·5	36·0
Ambala	115·8	115·4	112·9	112·4	114·9	36·5	31·5	34·0	34·0	34·0
Ludhiána	116·3	115·3	113·9	115·4	116·8	36·8	35·5	34·5	36·6	39·1
Lahore	118·1	114·6	116·6	118·6	118·1	36·2	35·2	32·2	34·0	37·0
Mooltan	121·0	117·5	118·5	117·4	119·5	34·5	37·5	32·5	34·6	38·5
Ráwalpindi	115·0	117·0	115·0	117·9	116·0	33·9	31·4	27·9	31·9	31·0
Siálkot	118·0	117·0	115·9	118·5	119·0	36·0	35·0	39·1	35·0	37·0
Montgomery	120·6	118·6	117·5	119·0	119·5	34·5	34·5	32·0	31·0	34·0
Khushâb	120·4	116·4	118·9	118·4	118·4	34·0	34·0	25·0	33·0	36·4
Murree	91·7	93·4	92·9	94·4	92·9	18·0	20·0	22·0	21·5	27·0
Simla	82·7	81·5	82·8	83·2	84·4	27·1	23·0	22·2	22·2	24·2

Natural Divisions of the Province.

33. Thus the Punjab may be divided, in accordance with its physical features, into four great natural divisions, each of which is briefly noticed below. The Himalayan region and the corner cut off by the Salt Range are special

tracts distinct in all their characteristics from the plain country of the Province. This last, excluding the submontane zone, which connects it with the hill regions to its north, is divided by a meridian passing through Lahore into two very dissimilar tracts which may be called respectively the Eastern and the Western Plains; and one of the most striking features of the Province is the strong contrast which these two tracts present, whether from a physiographical or from an ethnographical point of view, and the comparative suddenness with which the transition takes place as the intangible line which separates the one from the other is crossed.

Contrast between the Eastern and Western Plains.

34. Physically, the Eastern Plains are arable plains of moderate rainfall and almost without rivers, save along their northern and eastern edges; while the Western Plains except where canal irrigation has been introduced consist of arid pastures with scanty rainfall traversed by five great rivers, of which the broad valleys alone are culturable. Ethnographically, the distinction between the people of the two tracts is in a large measure that between the Hindu inhabitants of India and the Musalmán tribes of the trans-Sulaimán country. But the difference is not merely, or even chiefly, one of religion. The tribal organization, the structure of society, the customs of daily life, and even the tenures of land, present a very marked contrast in the two tracts; and perhaps the distinctions may be best summed up by saying that to the east the caste and to the west the tribe is the social unit. How very distinct the social connotations of the respective words are is shown in the Report on the Punjab Census, 1881. Within the hills and in the submontane zone which skirts them the same distinction is to be found. But the line which separates the eastern from the western type lies much further to the west than in the plains, and may be said roughly to pass through the point where the Salt Range leaves the Himalayas. The several tracts thus indicated will now be separately discussed.

The Himalayan Tract.

35. Within the great net-work of mountain ranges which fringe the central system of the Himalayas are situated the States of Chamba, Mandi and Suket, together with Náhan, Bashahr, and the 18 smaller States which are under the charge of the Superintendent of Hill States at Simla, the hill station of Simla and the great Kángra District, the latter including the Kulu Valley, which stretches up to the mid-Himalayas, and the cantons of Láhul and Spiti, which, situated beyond the mid-Himalayas, belong geographically to Ladákh and Tibet rather than to India. This mountainous tract includes an area of some 20,000 square miles, much of which is wholly uninhabited, and a scanty population of about 1,650,000 souls living scattered about the remaining area in tiny hamlets perched on the hill-sides or nestling in the valleys, each surrounded by its small patches of terraced cultivation, irrigated from the streams which run down every gulley, or fertilised by the abundant rainfall of the hills.

Races of the Himalayas.

36. The people chiefly consist of hill Rájpúts, including Thákars, Ráthís and Ráwats, and of Kanets, Ghiraths, Brahmans and the Dágís or menials of the hills. But it is probable that only the very highest classes among the Brahmans and Rájpúts have preserved the purity of their blood; it is certain that the Aryan and aboriginal stocks have mingled with unusual freedom; and all between the very highest and the very lowest form a practically continuous gradation, within which it is difficult to draw any definite lines of demarcation. The hill people are, whether by origin or by long isolation from their neighbours of the plains, very distinct in most respects from the latter, and they speak dialects peculiar to the hills though belonging to the Hindi group, except in the trans-Himalayan cantons where Tibetan is spoken. They are almost exclusively Hindús, but curiously strict as regards some, and lax as regards others, of the ordinances of their religion. The nature of the country prevents the growth of large towns; trade is confined to the little that crosses the high passes which lead into Tibet; and the people are almost wholly rural, supplementing the yield of their fields by the produce of numerous flocks of sheep and goats, and by rude home-manufactures with which they occupy

themselves during the long winter evenings. They keep very much to themselves, migration being almost confined to the neighbouring mountains and low hills.

The Submontane Tract.

37. Skirting the base of the hills, and including the low outlying range of the Siwáliks, runs the narrow submontane zone, with an average breadth of some 25 to 30 miles measured from the foot of the Himalayas proper. This tract, secure in an ample rainfall, and traversed by streams from the neighbouring hills, has an area of some 10,000 square miles, comprises some of the most fertile and thickly-peopled portions of the Province, and is inhabited by a population of about 4,650,000 souls, who occupy an intermediate position in regard of race, religion, and language between the peoples of the hills and of the plains, Muhammadanism being less prevalent, Hindi more generally spoken, and Rájpúts and hill menials more numerous than among the latter. The Gujars form a special feature of this zone. The tract has only one large town, Siálkot, which has a population of 45,374 souls; its trade and manufactures are insignificant, and its population is almost entirely agricultural, and in the low hills pastoral.

The Eastern Plains.

38. Turning to the plain portions of the Punjab, we find that east of Lahore the rainfall is everywhere so far sufficient that cultivation is possible without irrigation in fairly favourable seasons; but over the greater portion of the area the margin is so slight that, save where the crops are protected by artificial irrigation, any material reduction in the supply entails distress, if not actual famine. The Eastern Plains may be roughly divided into four separate regions. A broad strip parallel to the submontane zone partakes in a lower degree of its ample rainfall. It is traversed by the Upper Sutlej, the Beas, the Ravi, the Bári Doáb Canal, and many smaller streams, which bring down with them and deposit fertilizing loam from the lower hills; irrigation from wells is everywhere easy; and the tract is but little inferior in fertility, security of produce and populousness to the submontane zone itself. Its width varies from 20 to 30 miles and its area is some 8,800 square miles. The next most fertile strip is that running along the eastern border of the Province, parallel to the River Jumna. It enjoys a fair average rainfall; it includes the low riverain tract along the Jumna itself, where well-irrigation is easy; the Suraswati and its tributaries inundate a considerable area, and much of it is watered by the Agra and Western Jumna Canals, so that it is for the most part well protected against famine. It has an average breadth of some 35 or 40 miles and its area is about 5,000 square miles. Along the southern border of the Eastern Plains lie the tracts known as Hariána and Bhattiána, which constitute the most unfertile portion of the area under consideration. A large part of this tract skirts the great Rájpútána desert; the soil is often inferior; the rainfall always scanty and precarious; while, except in the south-eastern corner, where alone wells can be profitably worked, irrigation was till recently unknown, save where the Western Jumna Canal enters Hissar and the Sutlej borders the Sirsa District. Its width is from 40 to 50 miles, its area about 11,900 square miles, and its population about 1,800,000. This and the central portion, next to be described, together constitute the great area of closed drainage already mentioned. This is the part of the Punjab which has suffered most severely in famine years, but much of it has now been protected by the construction of the Sirhind Canal, and the Sirsa Branch of the Western Jumna Canal. The remaining or great central portion of the tract includes the larger part of the great Sikh States. It occupies an intermediate position in respect of fertility between the two preceding tracts, the rainfall generally being highest and the soil best to the east, west and north, in the direction of the Jumna, the Sutlej and the hills, and lowest and worst in the centre and south; while to north-east the Ghaggar system of hill streams inundates a certain area, and well-irrigation is practised along the Sutlej and the northern border. As noted above, the opening of the Sirhind Canal has greatly altered the agricultural conditions of this part of the Province. Exclusive of branches belonging to Native States, the canal irrigated nearly 1,139 square miles in 1901-02. The Eastern Plains until recently included the most fertile, wealthy and populous portions of the Province, but with the phenomenal progress made within the area irrigated by

the Chenab Canal, where the favourable conditions of tenure granted to the colonists tend to promote agricultural prosperity and trade, the disparity between the Eastern and Western Plains is becoming less apparent. Within the Eastern Plains lie the three great cities of Delhi, Amritsar and Lahore, besides a large proportion of the larger towns; and the population is, by comparison with that of the Western Punjab, largely urban. Trade and manufactures flourish and the greater part of the culturable area is under the plough.

The Western Plains.

39. The great plains lying to the west of the Lahore meridian present a striking contrast with those to the east of that line. They form the common terminus of the two Indian monsoons, which have exhausted themselves of their vapour before they reach their goal; and the rainfall, heaviest in the north and east, and decreasing towards the west and south, is everywhere so scanty that cultivation without irrigation is absolutely impossible. But in this very circumstance they find their security against famine or distress from drought, for their cultivation is almost independent of rain, a failure of which means nothing worse than a scarcity of grass, in itself a sufficiently serious calamity. Rain is, of course, needed here as elsewhere; but its absence means only a diminished yield, and not, as in portions of the Eastern Plains, no yield at all; and so little is sufficient if the fall comes at the right time, and absolute drought occurs so seldom, that the crops may be said never to fail from this cause. The prosperity of the tract, however, to some extent depends upon the rainfall in the mountain catchment areas from which the great rivers are fed, as insufficient floods may seriously affect the working of the inundation canals, large and small, which have been carried out from the Sutlej, the Lower Chenab, the Upper Jhelum and the Lower Indus, across the zone of well-irrigation into the edges of the central steppes, and render cultivation possible along their courses. In the long hollows of the *thal* or sandy desert of the Sind-Ságar Doáb wells are sunk and the drainage of the *bár*, or stiff loam uplands, collected in local depressions, provides moisture for a somewhat restricted cultivation. But though some of the finest wheat in the world is grown on the wells of the western *thal*, the proportion of the area thus brought under the plough is wholly insignificant. The tract which includes the large Native State of Baháwalpur is traversed throughout its length by five great rivers, the Sutlej, Ravi, Chenab, Jhelum and Indus; and along either side of each of these runs at a distance of a few miles a more or less distinctly marked bank which defines the excursions of the river within recent times as it has shifted from side to side in its course. These banks include between them strips of low-lying land which are periodically inundated by the rising floods as the winter snows of the Himalayas melt under the summer sun, or in which the nearness of sub-soil water makes well-irrigation easy. Outside these narrow boundaries are the Western Plains or Doábs, naturally high and arid, but which under irrigation can be made to yield crops of surprising richness. The physical conditions of one of these Doábs, that between the Ravi and the Chenab Rivers, have been revolutionised within the past fifteen years by the construction of the Chenab Canal. The Jhelum Canal now under construction will effect a similar transformation throughout the smaller Jetch Doáb. The southern portion of the plains between the Sutlej and the Ravi will, it is hoped, some day be fertilised by a Lower Bári Doáb Canal. The crowning triumph of irrigation in Northern India will be attained when the waters of the Indus are conducted into the desert of the Sind-Ságar Doáb. The progress and development of such projects will necessitate a rewriting every ten years of the account of the physical and political geography of the Western Plains. The area of the Western Plains is some 58,000 square miles; its population, numbering about 5,200,000 souls, includes little more than one-fifth of the people of the Punjab. Mooltan is the only town of more than 30,000 inhabitants; and the population is very markedly rural. There is no manufacture of importance. Pastoral pursuits occupy a more important position than in the rest of the Punjab, agricultural produce being largely supplemented by clarified butter, wool, hides and barilla.

The Salt Range Tract.

40. This tract includes the districts of Ráwalpindi and Jhelum and a small portion of the Shahpur District and presents in almost every respect the

strongest possible contrast with the Punjab proper. Its physical configuration, which has already been described in paragraph 14, is so broken and confused that it is impossible without going into great detail to separate it into parts, each of which shall be even approximately homogeneous. In the mountainous tracts of the Murree and Kahúta Tahsíls of the Ráwalpindi District, there is an ample rainfall. Except immediately under the hills, the rainfall, while quite sufficient in ordinary years, leaves little margin as protection against distress in unfavourable seasons, while irrigation is almost unknown. The tract has an area of about 9,000 square miles and a population of some 1,400,000 souls.

HISTORICAL SUMMARY.

The Moghal Occupation of the Punjab.

41. The modern history of the Punjab, as a distinct and independent part of India, may be said to have commenced in December 1763 and to have closed with the battle of Gujrát on the 22nd of February 1849. From almost the earliest days of the Mussalmán invasions the Province of Lahore had followed the fortunes of the transient kingdoms that alternately rose and fell at Ghazni, at Kábul, and in Delhi, till it was incorporated in the more stable empire founded by Báber; and for upwards of two hundred years the Punjab enjoyed comparative peace and prosperity under the rule of the Moghal Kings. The country between the Indus and the Sutlej lies as the natural outwork of Hindustán against irruptions from the North. It was consequently the first to feel the blow that shook the foundations of the Moghal Empire, and precipitated its dissolution. The Moghal Governor of Lahore appears to have given his masters ample warning of the storm that was about to burst on Upper India, but his intelligence was received unheeded by the Delhi Court, and, in 1738, Nádir Shah crossed the Punjab without opposition, returning by the same route after the capture and sack of Delhi in 1739. There followed in the Punjab an immediate collapse of the already much weakened authority wielded by the provincial governors of the Moghal Kings. For the next eight years the history of the Province is the record of the selfish intrigues and struggles for independence of the Moghal representatives, till, in 1747, Lahore fell before the Duráni troops, and the Punjab was gradually, and not without some feeble efforts on the part of the Delhi King to check the Afghán advance, incorporated in the dominions of Ahmad Shah, Abdáli. The Afghán tenure of the country cis-Indus, however, appears to have been of the weakest, even after the victory of Pánipat had made Ahmad Shah, for the time, the arbiter of Northern India. His attention was directed more to his native country and Persia than towards consolidating his power in the East; and, although he repeatedly overran the Punjab, on the eighth and last occasion in 1767 he made no effort to establish a permanent administration. The Duráni Governors were left to shift as they could; the people did what they liked; at the periodical appearances of the Shah the revenue was plundered rather than collected; and whenever the Afghán armies retired the country reverted to its normal condition of lawlessness and disorder. During this period of confusion the Sikhs were gaining in numerical strength and political importance. They appeared first as bands of marauders, issuing from fastnesses in the low hills along the base of the Himalayan ranges from the Chenab to the Sutlej, animated by a common religious enthusiasm and a common hatred of Muhammadans. It would be out of place here to dwell on the anti-Mussalmán revival in the North, which was almost contemporary with the rise of the Hindu Mahrattas in the South, or to trace at length the process in the course of which a sect of harmless devotees was developed into a body of bold and determined robbers, the avowed enemies of the Mussalmán rulers of the plains; and eventually into a powerful State. Suffice it to say that the change must be traced directly to the persecution they suffered at the hands of the Emperors Aurangzeb and Bahádur Shah, which at one time had nearly extinguished the sect. After the defeat and execution at Delhi of Banda, the disciple of the last Sikh Guru, Govind Singh, till the invasion of India by Nádir Shah, a period of nearly thirty years, nothing is heard of the Sikhs; but when that conqueror had seized Delhi and the empire was fast falling to pieces, they are stated to have taken advantage of the confusion that

followed, and to have plundered the peaceable inhabitants of the Punjab who had removed their property to the hills for safety from the Persian invaders. Enriched with these spoils, the Sikhs emerged from the hills and built a fort on the Ravi, whence they made predatory incursions and are said to have harassed the army of Nádir Shah on its way home to Persia laden with booty. The oppressions and exactions of the powerful in that time of trouble drove the impoverished Ját zamíndárs of the Punjab to despair. As a bond of union and strength against their oppressors they resuscitated the latent fire of the Sikh ritual. The spirit of the revived sect displayed itself at first in secret associations and isolated acts of depredation. The neglect or feebleness of the ruling authority enabled the associations to prosper. The more successful leaders gathered followers round them. The cause became popular, the number who joined the nucleus of malcontents augmented rapidly, and in a few years the Chiefs were able to form encampments in open defiance of the ruling authority, to approach the sacred city of Amritsar, and to maintain themselves in its vicinity. The different associations were held together by a common interest, no less than by the profession of a new faith; and a system of general confederation for defence or for extensive operations requiring more than single efforts was early arranged between the Chiefs. During the earlier invasions of Ahmad Shah the Sikhs appear to have scattered before the danger, only to re-form, when it was passed. After a time, seizing the opportunity afforded by the convulsions of the expiring Moghal Empire, they slowly encroached, till, in 1762, the Afghán Governor of Lahore could scarcely show himself beyond the walls of the city, and the annual assembly of all Sikhs was publicly held at Amritsar. The report of these events brought down Ahmad Shah. At Barnála, not far from Ludhiána, the Sikhs, for the first time, met the Afgháns in the open field, and the result was a crushing defeat, their loss being estimated at 20,000 men. But no sooner had the Shah returned to Kábul than the Sikhs began to recover their courage and to coalesce against the Muhammadans. They united to make one great effort against Sirhind. An assembly was called at Amritsar and 40,000 Sikhs marched on Sirhind. Zain Khán, the Governor, was defeated and slain in December 1763, and the town of Sirhind was destroyed. This event fitly marks a fresh departure in the history of the Punjab. That it was recognized to be so by the Sikhs themselves is evinced by the fact that they now commenced to strike coin, the immemorial sign of a declaration of independence in the East. They had ceased to be mere robbers, and henceforth formed a distinct body with clear political aims and asserting well-defined aspirations, which were soon to be fulfilled.

The Sikh Confederacy.

42. It will be convenient to give at this stage a brief sketch of their political system, more especially with reference to the confederacies which flourished for the next thirty years. Allusion has been made above to the circumstances which compelled a confederation for joint purposes of the different Sikh leaders with their following. Theoretically, all Sikhs are equal. Their religion, a pure theocracy, allowed no distinctions of rank among the members of the "Khálsa," or mystic commonwealth of the disciples of Guru Nának. But, in practice, the Sikhs naturally grouped themselves under the leadership of men known for their sagacity, courage or daring. The tie that bound the follower to his Chief was, however, soluble at the will of either. All that a Sikh Chief asked from a follower in those days was a horse and a matchlock. All that a follower asked was protection and permission to plunder under the banner of the Chief. The Sikhs could transfer their services to whom they pleased, or they could themselves, if fortunate, become leaders and acquire new lands in the name of the Khálsa. The need for joint action, however, soon compressed the many bands of Sikhs into twelve great confederacies or "misls"; they did not all exist in their full strength at one time, but one misl gave birth to another, or rose and fell in power according to the popularity or capacity of its leader. Each misl followed a Chief, called "Sardár"; but the title was of general application to the head of a small independent collection of Sikh horsemen as well as to the Chief of a great confederation. The plunder and conquest of a misl were divided in equal shares among its members, after setting apart a

portion for the Sardár. A bond between the confederacies was supplied in the solémn assembly of the whole Sikh people, which met year by year at least once at Amritsar. There the council of the Chiefs, termed the "gurúmata," discussed affairs affecting the Khálsa, or planned new expeditions. Further than this there was no law and no government; in private life each Sikh was free to act as he pleased, controlled only by the strong hand of his neighbour and the force of public opinion. That such a state of things could not endure long in the Punjab, after the link of a common enemy and common danger had been removed, is obvious. The prescient eye of the traveller Forster, in 1783, just after the birth of Ranjít Singh, foresaw already that "some ambitious Chief, led on by his genius and success, absorbing the power of his associates, would display from the ruins of their commonwealth the standard of monarchy." For a generation, however, the system worked sufficiently well, the Sikhs extending their power westwards up to the Jhelum River, and in the east, as far as the Jumna. Their predatory excursions reached to Mooltan in the south, and to Garhwál and Rohilkand towards Hindustán. When not plundering abroad, the Chiefs were busy preying on each other and prosecuting petty feuds.

The rise of Maharaja Ranjit Singh.

43. In 1793 Zamán Shah, whose mind seems to have been filled with the idle hopes of an Indian Empire, succeeded to the throne of Kábul. He descended on the Punjab, in 1797, with 30,000 men, but was recalled by a rebellion in Afghánistán after taking the city of Lahore. The Sikhs, as usual, gave way before the compact army of the Duránís, to close upon them and harass them on their retreat. In 1798 the Shah advanced again and entered Lahore without opposition; but after a few months' stay there, finding it impossible to make any arrangements for the permanent occupation of the country, or to render the Punjab in other respects a source of advantage to himself, he retraced his steps to his hereditary dominions west of the Indus, and the Sikh Sardárs returned, each to the territories he had acquired and had evacuated on the Shah's approach. Intelligence of designs by Persia upon Herát hurried the departure of Zamán Shah. He found the Jhelum swollen with the winter rains, and was unable to take his guns across. Being pressed for time, Zamán Shah wrote to Ranjít Singh, the youthful Sardár of the Sukarchakia misl, whose head-quarters were at Gujránwála on the road from Lahore to Jhelum, to forward the Afghán artillery to the Shah's representative at Peshawar. With that keen political perception which guided him so successfully throughout his life, Ranjít Singh had seen that the possession of the provincial capital of Lahore would give him a prestige and power without which he could not hope to carry out the plan he had formed of welding the many Sikh confederacies into one commonwealth with himself as its head. He promptly availed himself of the opportunity given by a chance flood of the Jhelum. A bargain was struck, and Ranjít Singh sent on most of the Afghán guns, receiving in return a royal investiture of the Governorship of Lahore. In the same year he established his authority in the city, with the aid of his mother-in-law, the famous Mái Sadda Kaur, the virtual head of the powerful Kanhya misl. Firmly seated in Lahore, Ranjít Singh proceeded by force, fraud or conciliation to extend his power. The next seven years were spent in the systematic reduction of the independent Sikh Chiefs in the country between the Jhelum and the Sutlej by the joint forces of the Sukarchakia, Kanhya and Ahlúwália confederacies under the hegemony of Ranjít Singh. At the same time periodical raids were made on the Muhammadans of Jhang and Mooltan. Throughout these years Ranjít Singh was steadily labouring to give coherence to the scattered elements of the Sikh people; his task was lightened by the mutual jealousies of the Sardárs, which made them incapable of united opposition to his encroachments, and no doubt also by the growing conviction of the Sikh people that it was better that there should be one head to the commonwealth, and that this head should be Ranjít Singh.

His Early Relations with the British.

44. The year 1805 witnessed the extinction of the system of confederacies acting in grave matters jointly for the Sikhs. In that year the last Gurúmata was held; and thereafter the force of the Khálsa was directed by the will of one man,

The year is also eventful in other ways. Jaswant Ráo Holkar, flying before the army of Lord Lake, reached Amritsar at the time when the Sikh Chiefs were collected there in council. They declined to assist the Mahratta. After some desultory negotiations, he made terms with Lord Lake, who had arrived on the banks of the Beas; and the hostile armies retired from the Punjab, after the conclusion of an agreement between Ranjít Singh and the British Commander, on the one part binding Ranjít Ringh and Fatteh Singh, Ahlúwália, his ally, not to aid Holkar, and on the other stipulating that British armies would respect Sikh territory so long as no cause for offence was given. It was the first contract of the trans-Sutlej Sikhs with the English. Indirectly, the events of 1805 bore enduring consequences, for there is no doubt that the destruction of the Mahrattas by Lord Lake produced a deep and lasting impression on Ranjít Singh, and induced him ever after to avoid a collision with the English. In 1806 Ranjít Singh commenced to lay his hands on the possessions of the Phulkián misl on the left bank of the Sutlej, without neglecting to profit by his neighbours towards Kángra and Mooltan. Towards the close of 1808 his permanent occupations on the south of the Sutlej had thoroughly excited the alarm of the Sikh Chiefs situated between that river and the Jumna, and in response to their appeals a British mission under Mr. Metcalfe was sent to Ranjít Singh. It was considered advisable to keep the cis-Sutlej States intact under British protection; there were, at the same time, projects being formed in Europe for a Franco-Russian invasion of India, and it was necessary to ascertain the condition of the countries and the feeling of the people lying beyond the then north-western frontier of the British possessions. Ranjít Singh entertained the British envoy for months with evasive promises and endless negotiations, till the despatch of troops to Ludhiána and Ambala suddenly warned him that the British Government was in earnest. Having learnt the lesson conveyed in the Mahratta wars, much impressed by the manner in which the envoy's escort of sepoys repulsed an attack of Sikh fanatics, and conscious that a rupture with the English would be the signal for the rebellion of the many Chiefs he had recently suppressed, Ranjít Singh wisely resolved to settle his relations once for all with the English. In April 1809 he signed the treaty of Amritsar, by which he entered into an engagement to preserve friendship with the British Government, and not to encroach on the left bank of the Sutlej. In return the British Government promised to have no concern with his territories to the north of the Sutlej. To the close of his life Ranjít Singh scrupulously respected the treaty, and never wavered from the position he then took up towards the English.

He extends his Dominions.

45. Barred by the British power towards the East, he turned to the West for that field of conquest and war without which it is doubtful whether he could have maintained his power as virtual sovereign of the Khálsa, although in name professing only to be its representative. He seized the fort of Kángra towards the end of 1809, and next year overran Gujrát and Jhang, finishing with an unsuccessful assault on Mooltan. About this time he commenced to form regiments of paid and drilled soldiers, accompanied by a distinct crops of artillery on the British model. In 1811 he finally reduced the Faizullapuría misl, located in the Jullundur Doáb, completing the absorption of the old confederacies trans-Sutlej. The troubles of the Saddozai kingdom now gave Ranjít Singh an opening in the direction of Peshawar. Wazír Fatteh Khán, Barakzaí, came to the Indus in 1812 to punish the adherents of Shah Shuja, and to recover the province of Kashmir for his nominee to the Kábul throne, Shah Mahmúd. Ranjít Singh was at the same moment engaged in reducing the Chiefs of Bhimbar and Rajauri on the passes leading to Kashmir. It was accordingly arranged that Ranjít Singh should admit the Afgháns to the passes, and place a force of Sikhs at the Wazír's disposal, receiving nine lakhs of rupees and a detachment of Afgháns to be employed against Mooltan as the price of his assistance. But Fatteh Khán's troops outstripped the Sikhs and captured Kashmir single-handed. Ranjít Singh thereupon seized Fort Attock on the Indus. Negotiations on the part of Fatteh Khán for its release were ineffectual; and, in July 1813, a drawn battle between the Sikhs and Afgháns left the fort in possession of

Ranjít Singh. In the same year he extorted the Koh-i-Núr diamond from Shah Shuja, then a refugee at Lahore. In the following year he made an unsuccessful attempt to conquer Kashmir. In 1816 he ravaged Bhimbar and Rajauri. After a rest of two years Mooltan was stormed in 1818. A few months after the fall of Mooltan, Wazír Fatteh Khán was killed by the order of Shah Mahmúd; the Barakzais rose immediately in rebellion, and the Saddozai kingdom was dissolved. Ranjít Singh resolved to carry his army across the Indus, and a rapid dash was made at Pesháwar, which the Sikhs entered in November 1818. The occupation was, however, short, and intended merely to cover the erection of fortified posts on the right bank of the Indus, opposite Attock. In 1819 he was occupied in taking Kashmir; in 1820 he led his army towards Baháwalpur and Dera Gházi Khan. The next year was spent in consolidating the conquests west of the Jhelum. No event of importance occurred in 1822, except the arrival of European military adventurers at the Court of Lahore, who were engaged to impart European drill to the Khálsa army. In 1824 further operations took place against Pesháwar. Sardár Yár Muhammad Khán, who held the place for the Barakzai family, made his submission at the approach of the Sikh army; but Muhammad Azim Khán, his elder brother, repudiated Yár Muhammad's action. Ranjít Singh thereupon crossed the Indus. At Naushera, on the Kábul River, he was confronted by the levy *en masse* of the Yúsafzai peasantry, eager to fight for the faith. A desperate struggle ensued; more than a thousand Sikhs were killed by the undisciplined villagers, who were themselves routed at the close of the day with great slaughter. On the 17th March 1824 Ranjít Singh made his entry into Pesháwar. After parcelling out the valley between Yár Muhammad Khán and his brothers, to be held by them on payment of tribute, he returned to Lahore. No military enterprise was undertaken in 1825 or 1826. In 1827 the fanatic Sayad Ahmad raised the standard of a holy war against the Sikhs in the Pesháwar Valley; but during the year a detachment of Sikh troops, under Budh Singh, Sindhánwália, inflicted a temporary check on the Gházís, near Akora. In 1829 Sayad Ahmad re-appeared, defeated Yár Muhammad Khán (who was killed in the action), and seized the city of Pesháwar; Ranjít Singh then took the field in the early part of 1830 to punish the Gházís, but on his crossing the Indus the insurgents melted away before him, and he returned, having appointed Sultán Muhammad Khán Governor of Pesháwar. Shortly afterwards the Yúsafzais, tired of Sayad Ahmad, rose against his rule, and he fled across the Indus to Hazára, where he was killed, in 1831, in a skirmish with the Sikhs.

His Closer Relations with the British.

46. During these years the relations of the British Government with Ranjít Singh had been drawn closer by the interchange of friendly missions and presents. The time seemed to have come for a meeting between the Governor-General and the Mahárája, and for dynastic reasons Ranjít Singh was anxious to appear before the world as the special friend of the British Government. Lord William Bentinck and the Mahárája accordingly met in great splendour at Rúpar in October 1831. No business of importance was transacted at the interview, except that a written assurance of perpetual friendship was given to Ranjít Singh; but in the spring of 1832 a treaty providing for the free navigation of the Indus and Sutlej Rivers by British merchants was concluded with him. From this period the Mahárája seems to have dismissed from his mind all distrust of the British Government, and, indeed, to have entertained sentiments of real friendship for the English. In 1834 the unfortunate Shah Shuja made another attempt to recover his kingdom, and while he engaged the Barakzáis at Kandahár the Sikh troops captured Pesháwar. The Barakzais defeated the Shah, and then turned towards Pesháwar. After a period of desultory fighting, Muhammad Akbar Khán, the eldest son of Dost Muhammad Khán, engaged the Sikhs at Jamrúd, the mouth of the Khaibar Pass, and defeated them with the loss of Sardár Hari Singh, the bravest General in the Khálsa. The event caused some anxiety, and reinforcements were pushed up at great speed to relieve the beleaguered garrison of Jamrúd. The Afgháns, however, knowing their own weakness, did not risk another action, but returned to Jalálabad.

Death of Maharaja Ranjit Singh.

47. We now come to the period of an important transaction, the restoration of Shah Shuja to the throne of Kábul by the joint aid of the British

Government and the Mahárája. Considerations, into which it is unnecessary to enter here, had determined the Governor-General to overthrow the Barakzai family that ruled in Afghánistán, replacing it by the long-exiled Saddozai King. A tripartite treaty was executed in 1838 between the three powers. Preparatory to the commencement of the campaign an interview took place between Lord Auckland and Ranjít Singh in November 1838 at Ferozepore; shortly after it the Governor-General visited Lahore and Amritsar, and was everywhere magnificently received. It was then observed that the Mahárája appeared feeble and worn out, and a few months after his eventful life closed on the 27th of June 1839 at the age of fifty-nine. Considered from one point of view, the career of this extraordinary man had been an absolute success. He found the Punjab a waving confederacy, a prey to the factions of its Chiefs, pressed by Afgháns and Mahrattas, and ready to submit to English supremacy. He left it a powerful kingdom. He found the military force of his country a mass of rough, undisciplined horsemen, and left it a large and well-drilled army, supported by three hundred guns. Further, he had the wisdom to avoid coming into conflict with the English without any loss to his own dignity or position. But where he may be said to have failed is that he did not create stable political institutions in place of what he had destroyed. The military despotism he had formed gave no promise of permanence, depending as it did entirely on the will of the army. The national and democratic instincts of the Sikhs were concentrated in the armed Khálsa, and as soon as the soldiers learned their power, neither the King nor the people could avail to withstand them. Much of the trouble, too, that befell the Sikh Government after Ranjít Singh's death may be traced to the inordinate power he had permitted his favourites to acquire, at first no doubt intentionally as a counterpoise to the old Sikh Sardárs of the misls, and latterly from the force of habit and the weakness of a wrecked constitution and early old age. Foremost in influence and ability of the favourites were the three Dogra brothers from Jammu, Guláb Singh, Dhián Singh and Suchet Singh; next came Jamadár Khushál Singh, originally a Brahman, from a village near Meerut; other leading men at Court were the Sindhánwália Sardárs, distant relatives of the Mahárája; Faqír Azíz-ud-dín, who was throughout the trusted counsellor of Ranjít Singh and practically his Foreign Minister; Bháis Govind Rám and Rám Singh, and Misr Beli Rám, the Treasurer. As regards the internal administration of the country, the government of Ranjít Singh seems in many respects to have been better than the contemporary governments of neighbouring independent Native States. There were no regular courts of justice; trade was hampered everywhere by duties and State monopolies; there was no attempt to develop the country; and the attention of all officials was mainly directed to the realization of the revenue. But oppression beyond the customary degree was punished, the country from the Indus to the Sutlej enjoyed peace, and the comparatively mild system of government, such as it was, no doubt was popular and suited to the still untamed tastes of the people.

Events subsequent to Maharaja Ranjit Singh's Death.

48. The Mahárája was succeeded by his son, Kharak Singh, with Rája Dhián Singh of Jammu as Wazír. Mahárája Kharak Singh's character was weak, almost imbecile, and utterly incapable of controlling the elements of disorder which the removal of the firm hand of his father was about to release from confinement. Towards the end of October 1839 the Mahárája gave great offence to Dhián Singh by taking into his favour a favourite named Chet Singh, a man of low birth and no capacity. With the active assistance of Mahárája Kharak Singh's son, Nao Nihál Singh, whose energy of character and ability gave great promise, Chet Singh was murdered by the Dogra party, and thenceforth Kharak Singh was allowed little voice in State affairs by Nao Nihál Singh and Rája Dhián Singh. At the same time Nao Nihál Singh was secretly preparing for a decisive struggle with the Dogra brothers. In the midst of the preparations Mahárája Kharak Singh died in November 1840. Upon the conclusion of the funeral rites the new Mahárája Nao Nihál Singh, and his Court, including all the members of the Jammu family, except Rája Guláb Singh, were passing through a covered gateway when a portion of the structure fell and killed both

the Mahárája and the eldest son of Rája Guláb Singh, who was seated on the same elephant. The throne of Lahore was again vacant. It was claimed by Sher Singh, a reputed son of Mahárája Ranjít Singh. A short interregnum followed; the mother of Nao Nihál Singh, supported by the Sindhánwália Sardárs and Guláb Singh of Jammu, claimed the regency, at any rate till it became certain that a posthumous son would not be born to Mahárája Nao Nihál Singh. On the other hand, Rája Dhián Singh was in favour of the claims of Sher Singh, but, considering the temper of the Sikhs, thought it better to wait. A council of regency was accordingly arranged. But it managed affairs badly; the army became discontented and gradually declared for Sher Singh. He suddenly appeared before Lahore in January 1841; Rája Guláb Singh closed the gates of the citadel and defended himself with great obstinacy till his brother, Dhián Singh, arrived from Jammu and negotiated a surrender. Sher Singh was then proclaimed Mahárája, and the Sindhánwália Sardárs were banished. The soldiers profited by the *coup d'état* to break loose; they murdered obnoxious officers, and plundered the city of Lahore; nor was the spirit of violence confined to the troops at the capital: it spread to Kashmír and Pesháwar; in the former place the Governor was killed and in the latter the soldiery were only curbed by a threat to raise the surrounding Muhammadan population against them. A general plunder of the Punjab was universally expected. Towards the summer of 1841 the disturbances subsided; but the evil had been done, the army had now learnt its strength, and henceforth it was no longer the instrument of the Mahárája's government, but considered itself, and was regarded by others, as the representative body of the Sikh people, as the visible Khálsa and master of the commonwealth. In military matters the troops still obeyed their officers, but the attitude of the army relatively to the executive government of the country was solely determined by an assemblage of committees or "panchávats," which were composed of men selected by each regiment in consideration of their general character as faithful Sikh soldiers or for the influence they possessed with their comrades. In November 1841 the insurrection broke out in Kábul, which terminated in the annihilation of the British army in Northern Afghánistán, the gallant little force at Jalálabad excepted. The disaster appears to have had no effect, at the time, upon the Sikhs; Mahárája Sher Singh gave willing aid in the collection of supplies for the troops under General Pollock, and a Sikh contingent was present at the forcing of the Khaibar and the relief of Jalálabad. Sher Singh was now becoming impatient of the Jammu party. In June 1842 the mother of Nao Nihál Singh had been killed,—an event from which Rája Dhián Singh derived increased influence; but in October 1842 the Mahárája recalled the Sindhánwália Sardárs, and the history of the remainder of his reign is occupied by the intrigues of the opposing factions at his court, the Jammu brothers on one side and the Sindhánwáliás on the other being the leaders. Eventually the aims of both factions became practically the same,—to destroy their enemies, together with the Mahárája, and then to reign supreme over the Punjab as the guardians of the young Dalíp Singh. The Sindhánwáliás took the initiative. On the 15th September 1843 they killed Mahárája Sher Singh and his son Partáb Singh, and on the same day also Rája Dhián Singh. They then seized the fort at Lahore and proclaimed Dalíp Singh Mahárája and Lehna Singh, Sindhánwália, his Wazír. But they had neglected to secure Rája Suchet Singh, the brother, and Rája Híra Singh, the son, of the murdered Minister. By extravagant promises these two gained the troops over to their side; they surrounded the fort, took it after a desperate resistance lasting two days, and the tragedy ended with the deaths of the Sindhánwália Sardárs, and the proclamation of Dalíp Singh as Mahárája with Rája Híra Singh as his Wazír. During these troubles the soldiery plundered Lahore. The new Minister raised the pay of the common soldiers by two-and-a-half rupees a month, and the troops realized that they were the uncontrolled masters of the kingdom. From this stage onwards to the close of the second Sikh War the proceedings of the army constitute the history of the Punjab. Rája Híra Singh's administration is a series of efforts to conciliate the troops. Rája Suchet Singh, his uncle, made an endeavour to supplant him, but the attempt was crushed with ease and Suchet Singh was killed.

Next, Sardár Attar Singh, Sindhánwália, the surviving brother of the Sardárs who killed Mahárája Sher Singh, rose against Híra Singh, but was defeated and slain by the troops who were still faithful to the young minister. In the same action Kashmíra Singh, a reputed son of Mahárája Ranjít Singh, was killed on the side of the rebels. So far the young son of Dhián Singh had, in his acts and successes, surpassed the general expectation, and an interval of some months was passed in comparative quiet. But on the 21st December 1844 another sanguinary revolution annihilated the few vestiges of a regular government that remained at Lahore. The fall of Híra Singh may be attributed to the agency of three parties: the old Khálsa Chiefs who always disliked the Dogra family; the mother and uncle of the young Mahárája who thirsted for power; and the army whose interest it was to have rapid changes of the ruling power. On the 21st of December Jowáhir Singh, uncle of the Mahárája, presented the boy to the soldiers on parade, and exhorted them to remove a wicked minister who meditated the destruction of their sovereign, promising large donations to the troops if they complied with his wishes. Rája Híra Singh fled with a few companions, but was overtaken and killed by the soldiers. His house and treasure were made over to the army. All operations were now openly undertaken by the sole direction of the army committees or panchávats. Their first act was to attempt to extort a fine from Rája Guláb Singh of Jammu; by a mixture of force and conciliation he contrived to evade the danger; and, declining the office of Wazír, saw Jowáhir Singh installed as vice-gerent for the Mahárája in May 1845. In the same month the daughter of Sardár Chattar Singh Atáríwála was betrothed to Dalíp Singh. The government of Jowáhir Singh and his party proved to be despicably weak and corrupt. Peshora Singh, another reputed son of Ranjít Singh, conceived that the opportunity had come to seize the throne, and proclaimed himself Mahárája at Attock in July 1845. Sardár Chattar Singh marched against him; the rebellion collapsed, and Peshora Singh was secretly put to death by order of Jowáhir Singh. No sooner had the news reached Lahore than the military committees resolved that Jowáhir Singh must die as a traitor to the Khálsa. The murder of Peshora Singh was distasteful to the soldiers, who venerated the memory of the great Mahárája, and the rivals of Jowáhir Singh, chief of whom was Lál Singh, fomented the ill-feeling. On the 21st September 1845 Jowáhir Singh was accordingly summoned to appear before the Khálsa and answer for his misdeeds. He went, accompanied by the Ráni and the young Mahárája. The latter were removed, and Jowáhir Singh was then executed by the troops. The act was carried out with the deliberation and calmness that attend a judicial proceeding. For some time after the death of Jowáhir Singh no one seemed willing to become the supreme authority in the State. Rája Guláb Singh was urged to take the office of Wazír, but he and all others were overawed, and the Ráni herself for some time carried on the government, the troops actually putting up the appointment of Chief Minister to auction. The need of a responsible head was, nevertheless, apparent; and as the soldiers were by degrees being wrought upon to wage war with the English, Lál Singh was nominated Wazír, and Rája Teja Singh, brother of Jamadár Khushál Singh, confirmed as Commander-in-Chief in November 1845. There appeared, however, to be no hope that the troops would permit this arrangement to be more lasting than its predecessors; as a desperate resource, therefore, in order to turn the thoughts of the turbulent Khálsa in another direction, the Ráni and her party appeared to have originated the proposal of a campaign across the Sutlej, which they earnestly expected would terminate with the destruction of the army.

First Punjab Campaign.

49. Meanwhile the British Government had for some time been aware that there could be but one end to the tragedy being enacted at Lahore, and that was war with the English. Troops were therefore quietly being massed on the North-West Frontier, especially at Ferozepore; while early in December 1845 the Governor-General joined the Commander-in-Chief at Ambala. The attitude of the Government during this period of anticipation was, however, entirely pacific, and the English stood on the defensive till attacked by the Sikhs. On the 17th November 1845 the panchávats of

the Khálsa made up their minds for war ; the resolution was approved by the Darbár ; and after a solemn meeting of the deputations and the commanders at Ranjít Singh's tomb, the Sikh army, consisting of about 60,000 men with 150 guns, was set in motion towards the British frontier. The details of the campaign are sufficiently known. On the 18th December 1845 the first action was fought at Mudki ; three days afterwards followed the toughly-contested battle of Ferozeshahr ; on the 22nd January 1846 the Sikhs were defeated at Alíwál ; and lastly, on the 10th February 1846, the entrenched position of the Khálsa at Sobráon, on the left bank of the Sutlej, was taken with great loss to the Sikhs. All resistance was now at an end. The victorious British army marched unopposed to Lahore, which was occupied on the 22nd of February. Briefly, the terms made were :—the cession in full sovereignty to the British Government of the territory lying between the Sutlej and Beas Rivers ; and a war indemnity of one-and-a-half crores of rupees. As the Darbár was unable to pay the whole of this sum, or to give satisfactory security as an equivalent to payment of one crore of rupees, the cession was arranged of all the hill country between the Beas and the Indus, including Kashmir and Hazára ; the Darbár also engaged for the payment of the remaining fifty lakhs of rupees ; the disbandment of the Lahore army and its re-organization, upon a fixed scale not to be exceeded without the sanction of the British Government ; the cession of the entire regulation and control of both banks of the Sutlej ; a free passage through Sikh territory for British troops whenever required ; the recognition of the independent sovereignty of Rája Guláb Singh ; and lastly that the limits of Lahore territory should not be changed without the concurrence of the British Government. In addition, at the request of the Lahore Government, it was settled that a British force should remain at Lahore for a time to assist in the re-constitution of a satisfactory administration. Simultaneously a treaty was executed with Mahárája Guláb Singh of Jammu, by which the English made over to him, in independent possession, the hill country ceded by the Lahore Darbár, lying east of the Indus and west of the River Ravi, in consideration of a payment of seventy-five lakhs of rupees, and subject to the conditions of not changing the limits of his territories without the consent of the British Government ; of assisting it when at war in the countries adjoining his possession, and of acknowledging the supremacy of the British Government. At Lahore, Major Henry Lawrence remained in charge of political relations with the Darbár, of which Lál Singh was appointed the chief. Shortly afterwards the Governor of Kashmir resisted the transfer of his province to Mahárája Guláb Singh by force of arms, and pleaded the orders of Lál Singh in justification of his resistance. It was fully established at a public enquiry that this was the case ; Lál Singh was deposed and exiled to British India, and, at the solicitation of the Darbár, a fresh treaty was concluded in December 1846, by which, during the minority of Mahárája Dalíp Singh, a British Officer with a staff of assistants was appointed with full authority to direct and control all matters in every department of the State, which were to be carried on by a Council of Regency, its members to be fixed by the Governor-General. Further, a British force was to remain at Lahore, at the expense of the Darbár, and the British were to be at liberty to occupy any fort or position they thought advisable in the Sikh dominions. The arrangements indicated above were to terminate on the Mahárája attaining 16 years, on the 4th of September 1854, or earlier, at the option of the Governor-General.

Second Punjab Campaign.

50. For a time the work of re-organizing the shattered government of the country proceeded quietly and with every prospect of success. The invigorating influence of British Officers was everywhere perceptible. But it was improbable that the Khálsa would submit without one more blow for the power they had lost. The villages were filled with soldiers belonging to the disbanded army who were only waiting for a signal and a leader to rise in arms. There were also many minor causes for discontent ; kine-killing was no longer allowed to be a crime, and the hated Muhammadans, who were under Sikh rule a persecuted race, now held up their heads ; the people at large, too, believed that the English never intended to leave the Punjab. There was thus plenty of material for rebellion ready at hand. Intrigues were rife, and an

accidental collision sufficed to set the Punjab in a blaze. Two British Officers were deputed in April 1848 to Mooltan, in order to assist the new Sikh Governor of the place who had replaced Díwán Múlráj, son of the famous Díwán Sáwan Mal. On the 19th April Mr. Vans Agnew and Lieutenant Anderson were wounded by the Díwán's troops while Múlráj was showing them the fort of Mooltan. Next day they were killed, being deserted by their Sikh escort. There is no reason to believe that the first attack was made by the orders of the Díwán, or that it was anything but the sudden outburst of fanaticism. But, blood having been shed, Múlráj and his followers knew they could not retrace their steps, and considered rebellion would be a lesser evil than submission. Múlráj at once prepared for a siege, issued a proclamation calling upon all true Sikhs to rise against the British, and sent urgent appeals to all the leading Sardárs of the Khálsa. The mother of the young Mahárája was, also, about this time convicted of treasonable correspondence and removed to Benáres. There was some delay in operating against Mooltan, which was, however, gallantly invested in the meantime by frontier levies raised by Lieutenant Edwardes and the Baháwalpur troops under the command of Lieutenant Lake. In June 1848 Sardár Sher Singh, son of Sardár Chattar Singh, Atáríwála, was sent with 5,000 Sikh troops to co-operate with Lieutenants Edwardes and Lake. A British force under General Whish followed him in August. At this time Sardár Chattar Singh, Atáríwála, himself was Governor of Hazára. His troops were notoriously mutinous, but he gave no notice to the British authorities of the disaffection, which he shared and which he himself encouraged. On the 6th of August the Hazára troops mutinied. On the 19th August the news of this event reached Sardár Sher Singh at Mooltan, and on the 13th September he and his force went over to the enemy. The defection of Sher Singh compelled General Whish to raise the siege of Mooltan. There were now two centres of rebellion, whence issued fiery calls to the Khálsa to expel the English from the country. In October Sher Singh moved off to join his father, Chattar Singh, who meanwhile had taken Attock, invoked the aid of the Amír Dost Muhammad Khán, and marched towards the Jhelum to join his son, collecting insurgents as he went. The Amír responded by seizing Pesháwar and sending an Afghán contingent to join Chattar Singh. In October the British army had crossed the Sutlej; proceeding from Ferozepore across the Punjab at an angle to the Sikh line of march it came up with Sher Singh at Rámnagar on the 2nd of November, and there inflicted on him a severe check. The Sikh army, consisting of 30,000 men and 60 guns, made a stand at Chilliánwála, where on the 13th January 1849 an indecisive and most sanguinary battle was fought. Two or three days after the action Sardár Chattar Singh joined Sher Singh's camp, bringing with him a thousand Afghán horse and Sikh reinforcements. The Commander-in-Chief awaited the arrival of the column under General Whish, which had been set free by the fall of Mooltan, and then followed the Sikhs from Chilliánwála to Gujrát. Here, on the 22nd of February 1849, the last and decisive battle was fought, and the Sikh kingdom came to an end. The Sikhs were totally defeated, losing 55 guns; Pesháwar saw for the last time an Afghán garrison within its walls; the remnants of the Sikh army and the rebel Sardárs surrendered at Ráwalpindi on the 14th March 1849, and henceforth the Punjab became a Province of British India.

Annexation of the Punjab.

51. The Punjab was formally annexed by a proclamation on the 29th March 1849, on which day terms were granted to and accepted by Mahárája Dalíp Singh. He resigned the sovereignty of the Punjab and received a pension from the British Government until his death in 1893. His son Prince Victor Dalíp Singh has succeeded to his pension and resides permanently in Europe. On annexation steps were immediately taken to pacify the country. All forts, except those required for military or political purposes, were dismantled. A general muster was called of the Sikh soldiery together with all military retainers of the late Government and its Chiefs. The men were for the most part collected at Lahore and there paid up and disbanded, while the most promising of them were taken into the British service. All those who could not be admitted received gratuities and pensions; and the infirm and the superannuated were also pensioned. The process of reduction of the Sikh

army was thus quietly accomplished, and while employment was found for adventurous spirits, care was taken to avoid flooding the country with needy and desperate men.

Form of Administration adopted.

52. The British Government was now called upon to provide a new administration which should adapt itself to a mixed people and manage a warlike and stubborn class who had just been deprived of power. Order had literally to be evoked out of chaos. It was necessary that the people should be induced loyally to accept the change of Government; old prejudices and customs had to be removed, and new laws and restrictions had to be introduced. This revolution was peacefully accomplished, without a single riot or outbreak, although a large disbanded army had mingled with the people, when many adherents and servants of the Sikh Government were wandering unemployed about the country, and when the most influential section of the population was still animated with a feeling of nationality, of revenge against the conquerors, and of dislike to a change of institutions. In view of the peril which befell the British Empire in India only eight years after annexation of the Punjab, the experiment was a hazardous one. That the measures succeeded, and that the Punjab, instead of a source of danger, proved to be the mainstay of the English power in Upper India during the Mutiny, is to a great degree due to the sagacious and prudent manner in which the task of governing the newly-acquired territory was carried out by the men in whose hands Lord Dalhousie placed the trust. At the head of affairs was placed a Board of Administration consisting of three members, who, although acting jointly in matters of importance, took each a special charge of one of the functions of the Board, divided under the heads of political, revenue and judicial. The whole Province was divided into seven divisions, administered by Commissioners who corresponded direct with the Board; two divisions comprised the Sikh territories acquired before and at the first Sikh War; and the remaining five included the Punjab trans-Sutlej. For a short time the present districts of Peshâwar, Kohât and Hazâra were under the direct control of the Board, but about the year 1850 they were formed into a separate division. The divisions were sub-divided into twenty-seven districts in charge of Deputy Commissioners, who were provided with a staff of Covenanted Assistant Commissioners and Uncovenanted Extra Assistant Commissioners. The districts again were divided into *tahsîls* or sub-divisions for the collection of revenue, and police circles. The Board was entrusted with plenary authority to control and supervise all Departments. The Commissioners were Superintendents of revenue and police, and exercised the civil appellate and the criminal original powers of a Sessions Judge. The Deputy Commissioners were given subordinate civil, criminal and fiscal powers, combining in one person the different aspects of the administration, and thereby much increasing its vigour.

Laws framed and other Measures introduced.

53. The first object of attention was to place the revenue system on a sound basis. Settlements made during the regency of the Resident were upheld as temporary measures, and in tracts that had not been previously settled summary settlements to last five years were made, pending the introduction of regular settlements which would endure for from fifteen to thirty years. In the Civil Courts the rules current in the Sutlej Divisions were at first observed, as they were calculated to ensure substantial justice unfettered by technicalities. Subsequently a Punjab Code, embodying much of the customary Civil Law of the Province, was prepared. In Criminal Law the Code adopted during the period of the Residency was maintained. One of the principal duties of the new Government was to develop the resources of the country, to make canals, and, chief of all, to create roads; the latter did not exist, from a civilized point of view, in the country when it was taken over. The principal and earliest work of this kind that was undertaken was the construction of the Grand Trunk Road to connect Peshâwar with Lahore. The Bâri Doâb Canal was commenced, and many other works of public utility were either projected or undertaken. A strong body of military police under European military officers, comprising six regiments of foot and twenty-six troops of horse, in all 8,100 strong, was

raised in aid of the civil police, the establishment of which was of the strength of 6,900 men of all grades. The military police furnished guards and patrolled the country, and acted in the prevention of crime and apprehension of offenders, while the civil police, who were under the charge of the civil officers, were entrusted with the detection and prosecution of criminals, and the duties of watch and ward in towns and villages. In connection with the police, a measure may be mentioned which very materially led to the speedy pacification of the country and its subsequent tranquillity, *viz.*, the general disarmament of that part of the Province lying between the Indus and the Sutlej. (The cis-Sutlej Divisions and the territory round Delhi were disarmed at a later date.) It was carried out quietly and systematically without creating any serious annoyance. In all 119,700 arms of all descriptions were seized or surrendered. The sale, possession or manufacture of arms and ammunition, except in the trans-Indus tracts, was prohibited. In the frontier districts it was of course necessary to leave the people armed, in order to enable them to cope with their marauding neighbours of independent territory. With regard to these, special military measures were undertaken. The forts at the principal stations were repaired or rebuilt upon more scientific principles, a chain of fortified border posts was dotted along the whole length of the border line, parallel to which a military road was made with cross branches connecting it with the internal network of communications being established in the Province. A special force, the Punjab Frontier Force, under the direct orders of the Board, was raised for service, normally on the frontier, and only in special cases elsewhere. It consisted, at first, of five regiments of cavalry, the Corps of Guides, five regiments of infantry, three light field batteries, two garrison batteries, two companies of Sappers and Miners, and the Sind Camel Corps. Mule batteries were afterwards entertained in the Frontier Force, in place of the field batteries; the Sappers and Miners, were withdrawn, and a Gurkha regiment was added to the force. A few years after annexation the Camel Corps was changed into a regiment of infantry. The later history of the Frontier Force pertains to the administration of the North-West Frontier Province in which all its units are now employed.

Further improvements carried out.

54. The work of reclaiming the country, of civilizing its people and of developing its resources was carried on without interruption for the next seven years. The Punjab became gradually covered with the institutions of modern civilization; roads were made in every direction; canals were projected or constructed; schools, dispensaries and jails were erected in every district; a uniform Code of Civil and Criminal Law and Procedure was adopted; the currency was reformed; taxation on trade was removed; and a system of regular settlements was commenced, which was designed ultimately to embrace the whole Province, and in the course of which the *status* of all classes connected with land, the shares of the produce one class could demand from the other, and the portion which was due to Government, were accurately defined and recorded.

Appointment of a Chief Commissioner.

55. It will be sufficient to notice briefly the principal occurrences connected with the internal history of the Province, from annexation up to the present year. In 1853 the Board of Administration was abolished, and in its place Sir John Lawrence was appointed the first Chief Commissioner, as the head of the local executive administration, with control over the Punjab Frontier Force. Subordinate to him were appointed a Judicial and a Financial Commissioner, who were the chief authorities in the Judicial and Revenue Departments respectively. The Judicial Commissioner was also head of the Police: he supervised educational operations and superintended the control of Local and Municipal Funds. Among other measures, the following are principally noticeable as having been carried out during 1853:—The addition of another battalion to the military police, raising it to a strength of 7 battalions of infantry and 27 troops of horse; the virtual extermination of Thaggi, and the employment as organized bodies of labourers of the Mazbi Sikhs, among whom this crime was prevalent; the introduction, or rather re-imposition, of octroi duties in all towns and large villages in lieu of a house-tax with the full preference of the inhabitants; a determined effort to put down female infanticide which found expression at a great assembly of all the leading

Chiefs and Native gentlemen of the Province at Amritsar, when rules with a view to diminishing marriage expenses were accepted by those present and promulgated for general observance; and, lastly, the introduction of tea cultivation in the Kángra District, and extensive operations in arboriculture, nearly a million trees being planted in two districts alone. Including all the necessarily large expenditure consequent upon the annexation of a Province in the condition in which the Punjab was found to be when taken over, the financial results of the administration showed a surplus in 1851-52 of seventy-three lakhs of rupees, and in 1852-53 of thirty-five and three-quarter lakhs.

The Sepoy Mutiny.

56. The next three years from 1853 to the close of 1856 constitute a period of consolidation, during which the measures originated in the earlier years were completed or perfected. No events in the internal history of the Province call for special notice, except that the construction of a railway from Mooltan to Amritsar was under consideration, when the outbreak of the Mutiny put aside, for a time, that and many other schemes for the improvement of the country. On Sunday, the 10th of May 1857, the sepoys at Meerut mutinied, plundered the station, and marched to Delhi, where they were joined by their comrades of the garrison; next day the old Moghal King, Bahádur Sháh, who was residing there as a pensioner of the British Government, was proclaimed as their sovereign by the mutinous troops, all Europeans who could be caught were butchered, and the true character of the revolt was thus declared. There were at this time in the Punjab the following troops:—Hindustánís 35,000 men, Punjábi irregulars 13,000, Europeans 10,000 men; there were also 9,000 military police, among whom was a certain number of Hindustánís. The Europeans consisted of 12 regiments, of whom no less than 7 were either at Pesháwar or in the hills north of Ambala, leaving only 5 regiments to hold the country from the Indus to the Sutlej. The news of the massacre at Delhi reached Lahore on the 12th of May. The Chief Commissioner was absent at Ráwalpindi, and Mr. (afterwards Sir R.) Montgomery was the chief civil officer present. There had not been wanting premonitory signs that the sepoys were disaffected and likely to rise, and it was clear to all that immediate action must be taken. The civil and military authorities decided at once what should be done, and on the 13th May 3,000 Native troops were successfully disarmed at Meean Meer. At the same time European troops were thrown into the forts of Govindgarh and Phillour, the first important as commanding Amritsar, the second as containing a large arsenal from which subsequently were served the munitions of war for taking Delhi. On the 14th May the arsenal at Ferozepore was secured; the sepoys here mutinied on the following day and escaped without punishment. On the 21st of the same month the 55th Native Infantry rose at Mardán and fled to independent territory; many were killed in pursuit, and the remainder were destroyed by the hillmen. On the 7th and 8th of June the Native troops at Jullundur broke and escaped to Delhi. In the first week of July the sepoys at Jhelum and Siálkot mutinied; they were destroyed, as were the 26th Native Infantry, who rose at Lahore on the 30th July, and the 51st Native Infantry, who mutinied at Pesháwar on the 28th August. Simultaneously, with the vigorous suppression of Mutiny, 13,000 Native troops were disarmed without resistance during June and July. This large body of men was kept under a strict watch at different stations in the Province, proving a very inconvenient charge at a time when the Punjab was denuded of troops. While the Hindustáni troops were thus being disposed of, the despatch of reinforcements to Delhi, an object of paramount importance, proceeded without a break. About the 17th of May it had become apparent that the Punjab did not sympathise with the movement in Hindustán, and that a good spirit prevailed in the Punjábi troops. It was therefore safe to augment them; and it may be mentioned here that 18 new regiments were raised in the Province, 5 in May and June, 8 in August, and the remainder during the later months of the year. As these forces were being entertained to supply the place of those who marched down to Delhi, the stream of reinforcements was steadily maintained. Four regiments from the European garrison of the Punjab formed the greater portion of the European force that first marched upon Delhi. Next followed two wings of European regiments of

infantry. Then a considerable force of Native troops was despatched, including the Guides, two regiments of Punjab Cavalry, a body of Punjab Horse, two regiments of Punjab Infantry, and a body of 1,200 Pioneers raised from the Mazbi Sikhs; 7,000 men, forming the contingent of the cis-Sutlej Chiefs of Patiála, Jínd and Nábha, accompanied the regular troops to the siege of Delhi. It was on this occasion that the Guide Corps performed their memorable march of 580 miles in 21 days from Mardán to Delhi, where they arrived early in June, the first of the Punjábi troops. In the steps of the reinforcements mentioned above, an irregular force of 1,000 men was detached to clear the western part of the Delhi territory. Wagon trains were organized from Mooltan and Ferozepore *viâ* Ambala to Delhi. Siege trains, treasure, stores and transport animals were poured down from the Punjab for the besieging force. Finally in August one last effort had to be made to send reinforcements. There were then in the Punjab 6,000 armed and 12,000 disarmed Hindustáni sepoys, and 6,200 European soldiers, of whom nearly one-half were locked up in the Peshâwar Valley, and the greater part of the rest employed in guarding the disarmed troops. The need for aiding the force at Delhi was, however, imperative; it was therefore resolved, in spite of the grave risk thereby incurred, to send Brigadier-General John Nicholson with the movable column (which had destroyed the Siálkot mutineers) and every European who could be spared. Two half regiments of European Infantry, the 52nd Foot (belonging to the movable column) and three regiments of Punjab Infantry were despatched. These were followed by a siege train from Ferozepore; a wing of the 1st Bilúch Regiment arrived from Sind, and a contingent, 2,000 strong, from the Mahárája of Kashmir. There then remained only 4,500 Europeans (including sick) to hold the Punjab. The crisis had now come. If Delhi were taken speedily, all was well; if Delhi were not taken without delay, there would be a struggle for European dominion and existence in the Punjab itself. The most ignorant of the Punjab people had realized the danger to the British Empire; the least observant knew that the resources of the British Government in this Province were exhausted. The next few weeks after the departure of Nicholson's column were weeks of anxious suspense, in which all eyes were turned to Delhi. The tension became extreme. The first symptoms of the wavering faith of the people in the British power appeared in local outbreaks at Murree in the north and in the wild and barren tracts south of Lahore, between the Ravi and Sutlej. Both were, however, soon put down, and the fall of Delhi on the 14th September put an end to all further cause for apprehension. The first sign that the mass of the inhabitants had regained confidence was that the Sikhs of the Mánja, or the tract between the Ravi and the Sutlej Rivers, came forward for enlistment in the new levies. Hitherto they had held aloof. Exertions to reinforce the army in the field and to make up their losses by sickness and death were not relaxed after the capture of Delhi. On the 1st of May 1858 the aggregate number of Punjábi troops amounted to 58,000 men, of whom 35,000 had been entertained since the commencement of the Mutiny; and of the total number 12,000 men were in the field in Hindustán.

Measures taken for the Tranquillity of the Province.

57. It remains now to notice briefly the subsidiary measures in aid of the military operations for the suppression or prevention of the mutiny in the Province, and state the causes why the Punjab people and army resisted so long the tendency to rebellion. As regards the first, civil officers were immediately empowered to try and punish summarily, even with death, offences affecting the public tranquillity; a strict but judicious censorship was maintained over the Native Press; all letters addressed to sepoys were opened, and much curious and valuable information was thereby obtained. All treasure was concentrated at places where a European guard could be obtained. The ferries over the five great rivers of the Punjab were guarded with special care, and the country was thus divided into blocks of territory insulated from each other. All Hindustánís without employment were deported out of the Punjab, and mendicants and roving fakírs coming from the east were turned back. The tracts known as the cis and trans Sutlej divisions, those parts of the Punjab that lie east and south of the Beas and Sutlej, were disarmed, 69,000 stand-of-arms being given up by the people. These divisions had not been included in the

disarmament of the rest of the Punjab which took place in 1849. A few months later the Delhi and Hissar Divisions were also disarmed, 225,000 arms being taken by the police in addition to forty cart-loads of arms from the city of Delhi. The principle of recovering the value of plundered property from the persons, villages or towns implicated, by means of fines, was everywhere rigidly enforced. Lastly, the active co-operation of the people in the extirpation of the mutineers was secured by paying a reward of Rs. 50 for every mutinous sepoy delivered up alive, the captors being permitted to retain any property found on the person of the mutineer. The effect of this order was to place the Hindustánís as soon as they left cantonments among a nation of enemies. The financial position of the Province was a difficult one: all remittances from Calcutta were cut off, the demands of the besieging army before Delhi were large, and it took some time for money from Bombay to reach Lahore. A loan, producing 41 lakhs of rupees, was therefore raised: it served as a useful index to the state of public opinion. The attitude of the Native Chiefs dependent on the Punjab throughout the crisis was excellent. The Rája of Jínd was actually the first man, European or Native, who took the field against the mutineers, and his contingent collected supplies in advance of the English troops moving upon Delhi. The contingents furnished by other Chiefs have been mentioned above. With the exception of the Nawáb of Baháwalpur, who did not stir, every Chief in the Province, as far as he could, aided the English in preserving order and in suppressing rebellion. There can be no doubt that the action of the Chiefs had an important bearing on keeping the population steady.

Abstention of the Punjabis from the Rising of 1857.

58. The causes to which may be ascribed the general abstention of the people from the rising of 1857 are as follows:—In the first place, the country had been recently conquered and the memory of the English victories was still fresh. The Punjab is inhabited by antagonistic races between whom differences of religion have placed a deep and broad gulf; the Muhammadans naturally sympathised with the attempt to revive a Moghal supremacy, but dreaded the power of the Sikhs should the controlling hand of the British be withdrawn; the Sikhs for their part viewed with antipathy everything connected with the Delhi Kings; both Sikhs and Muhammadans of the Punjab disliked the Hindustánís; the vigorous acts of the authorities in May and June 1857 led the people to believe that the Mutiny would be easily overcome; at any rate they knew that the Punjab would not be given up for some time, and they sided with the power of the day. Trade was flourishing, and general prosperity and comfort prevailed owing to good harvests. There was no general desire for change; on the contrary, the incidence of revenue being light, and the people being contented, a reversion to the old order of things was not desired. The people had been disarmed and were taking to peaceful pursuits. The wild and adventurous spirits were absorbed in the forces that were enlisted, and the march upon Delhi was a popular expedition. The Chiefs and leading men had been kindly treated and were unwilling to see the present Government make place for the anarchy which was sure to follow. Moreover, there was no person in the Punjab who could command the allegiance of the masses. And when they did come to think that British supremacy in India might come to an end, and when the popular mind was drifting into disaffection, the fall of Delhi removed their doubts regarding the stability of British Rule, and they became again loyal subjects.

Events subsequent to the Mutiny.

59. The next few years after the Mutiny were devoted to restoring order and to taking up the task of progress which had been temporarily suspended. In February 1858 the Divisions of Delhi and Hissar were formally incorporated in the province of the Punjab. In August of this year two disarmed Native regiments at Mooltan revolted owing to misapprehensions of the intention of Government towards them. They were pursued and all of them either captured or killed. This was the last outburst of the mutinous spirit in the Native Army. The Hindustáni regiments that were disbanded at Meean Meer and elsewhere were sent to their homes. Other military measures were the transfer to the Bengal Army of 4 regiments of cavalry and 17 of infantry raised in the Punjab during the Mutiny. A regiment of Gurkhás was formed from men of this class in the Punjab Infantry and the Police

Battalions, and added to the Punjab Frontier Force. Rewards in the shape of grants of territory were made to the Chiefs of Patiála, Jínd and Nábha for the services rendered during the preceding year; and a large estate in Oudh was conferred upon the Rája of Kapúrthala. At the commencement of 1859 the Punjab together with the Delhi territory was placed under a separate Lieutenant-Governor. Sir John Lawrence was the first to hold the office; after a brief interval he resigned and left the Province, with the administration of which he was so intimately connected ever since its annexation to the British Empire, and was succeeded by Sir R. Montgomery. The year is remarkable for the commencement of the first railway in the Punjab, from Amritsar to Mooltan (on the 8th February 1859), and for the admission of water into the Bári Doáb Canal. The year 1860 is marked by a severe famine which afflicted the districts south of the Sutlej. Efforts were made to relieve the starving population, but there was great mortality. The districts along the Rájpútána border felt the effects of the famine most severely. The following years demand little remark on account of events of special importance; the resources of the country were quietly developed, and steady progress made in every branch of the Administration. In 1860-61 the Police were reformed, the military and civil branches of this force were amalgamated and placed under the orders of an Inspector-General. In 1862 the Penal Code was introduced in the Punjab. During these two years much was done to assimilate the Government of the Punjab to that of the older Provinces of British India. Special courts for the trial of civil suits were established, civil and criminal jurisdiction was conferred on some of the principal jágírdárs as Honorary Magistrates, taxation was imposed on the non-agricultural classes, and the land revenue system was framed on that of the North-Western Provinces. The conservation of the timber forests on the slopes of the Himalayas was taken in hand, the preliminary surveys and reports being made in 1861-62. The first exhibition of Arts and Manufactures in the Punjab was held at Lahore in this year. On the 10th January 1865 Sir R. Montgomery resigned the Lieutenant-Governorship of the Province, and was succeeded by Sir D. McLeod. In the same year the office of Judicial Commissioner was abolished, and a Chief Court, consisting of two Judges, was created by Act XXIII of 1865. In that year also the appointment of Settlement Commissioner of the Punjab was created, and Mr. E. Prinsep was the first to hold that office.

Sketch of the History of the Province from 1865 to 1881.

60. Henceforth the internal history of the Province, though always marked by some special features of its own, is practically that of the remainder of British India. In 1865 disturbances in Baháwalpur, and the simultaneous death of the Nawáb, compelled the interference of Government, and the State was placed under the care of a Superintendent. In 1867 special efforts, which have not proved successful, were made to encourage trade with Yárkand and Káshgar. The eastern and southern parts of the Province were visted by a severe drought in 1868-69, which culminated in a famine in the tracts to the south of the Sutlej. Relief works were promptly undertaken in the Jullundur, Lahore, Hissar and Delhi Divisions; in the two latter on an extensive scale, the number of persons that received relief in these Divisions from January to May 1869 being 2,100,000. Rain fell in March 1869, and for a time matters looked better, but the rainfall throughout 1869-70 was unseasonable, and the drought continued with increasing severity. But for a copious fall of rain in September, a famine more terrible than the famine of 1783, which is still remembered, would have devastated the country. Owing, however, to the timely adoption of further measures of relief, the exertions of all officers and the co-operation of the wealthier classes, the people were saved from starvation, and were subsequently helped to recover from the calamity by advances of money and liberal remissions of revenue. The famine was, as usual, attended by sickness. Small-pox and cholera prevailed to an alarming extent during the year. In June 1870 Sir D. McLeod retired from the office of Lieutenant-Governor and was succeeded by Sir H. Durand, who met with a fatal accident seven months afterwards. His successor was Mr. (afterwards Sir H.) Davies. The year 1871-72 was one of considerable legislative activity for the Punjab. The provisions contained in the Punjab Civil Code and in various Bengal

Regulations and administrative rules and orders were consolidated and re-enacted in the Punjab Laws Act. An Act (since superseded) was passed for the collection and settlement of the land revenue; and the Canal and Drainage Act codified the rules regarding irrigation in the Province. Special legislation was adopted to control the criminal tribes which are found in some strength in the Punjab, and some other measures were passed which have since been superseded. The experiment of employing prisoners on extra-mural labour at Rúpar on the Sirhind Canal work was commenced in this year. In January 1872 a band of Kúka fanatics caused a disturbance in Máler Kotla, which had been preceded by the murder of some Muhammadan butchers at Amritsar in August 1871. Repressive measures were promptly taken, and the ringleaders were exiled. In 1874-75 the first step was taken towards the separation of the judicial and executive functions, which, as explained above, had been combined in the persons of District Officers ever since the annexation of the Province. Separate Courts for the disposal of Civil suits were established in every district. In January 1876 His Majesty King Edward VII, then Prince of Wales, paid a visit to the Punjab. The year 1877 was marked by the Imperial Assemblage, and the gathering of all the Punjab feudatories at Delhi in common with the other Chiefs of India. Unseasonable weather in 1877-78 caused considerable anxiety. A scarcity was experienced in the districts of Hazára, Karnál, Hissar and Delhi, where special measures of relief had to be organized, and works were undertaken for the relief of the starving population. In April 1877 Mr. (afterwards Sir R.) Egerton succeeded Sir H. Davies as Lieutenant-Governor of the Punjab. In November 1878 the war with Amir Sher Ali Khán commenced, and the resources of the Province were fully taxed, as it formed practically the base of operations for the armies operating in Northern Afghánistán. In the earlier phase of the war contingents from the States of Patiála, Baháwalpur, Jínd, Nábha, Kapurthala, Faridkot and Náhan joined the British force, and performed excellent service. The years during which the war lasted, from November 1878 to the end of 1880, were marked by some scarcity, owing to deficient rainfall and considerable sickness, and trade towards the west was affected by military operations, but these called everywhere for increased labour, and large profits were made by many sections of the community, while the simultaneous construction of the railway towards Kohát and Pesháwar, which was pushed forward with much energy, afforded ample employment to the needy. On the termination of the war a Viceregal Darbár was held at Lahore by the Marquis of Ripon, at which all the Ruling Chiefs and principal Native gentlemen of the Province were present.

1882 to 1892.

61. During the decade ending 1892 the Province advanced quietly and steadily. Certain tracts suffered from local visitations, such as the locust plague of 1891, which brought portions of the Ráwalpindi and Jhelum Districts within reach of famine; or from destructive visitations of disease, such as the fever of 1890 and 1892, beside which even the cholera of the latter year, with its 50,000 deaths, sinks into insignificance. A net-work of railways, which left few portions of the Province in a position of isolation from the sources of food supply, was gradually completed, and almost the whole of this was amalgamated under a single administration as the North-Western Railway in 1885-86. Portions of the arid Ferozepore, Mooltan and Montgomery Districts were protected by new or improved inundation canals. The Sirhind Canal, opened in November 1882, was extended to irrigate large areas in British territory and Native States south of the Sutlej, while another portion of the same thirsty tract was also provided with a supply by the extensions of the Western Jumna Canal scheme known as the Sirsa Branch. The area watered by the Bári Doáb Canal was considerably enlarged; and the completion of the second stage of the Chenab Canal project opened up the greater portion of the Rechna Doáb to colonization. All these measures, together with the closer and more cautious attention on the part of all officials to revenue matters, which was a special feature of the decade, and the development of the new system of continuous enquiry and record of agricultural facts, which received formal recognition in the Revenue Legislation of 1887, were aimed at guaranteeing the Punjab as a whole from a repetition of the famines of the past. On the other hand, peace and partial

immunity from pestilence and starvation gave an extraordinary impulse to the growth of population, which the returns of the census of 1891 gave reason to fear might in some tracts soon begin to press on the limits of subsistence, in spite of the provision of new fields for industry. Towards the close of the administration of Sir Robert Egerton, the second Punjab Exhibition of Arts and Manufactures was held at Lahore. Sir C. U. Aitchison, who succeeded him as Lieutenant-Governor, assumed charge of office in the spring of 1882. During the early years of his administration the Punjab University was created, and the policy of Local Self-Government was introduced or extended by the District Board and Municipal Acts which then became law. The growth of political development is necessarily slow in a country like the Punjab, and at present it can hardly be said that these measures, of which too much was perhaps expected at the time, have so far yielded any commensurate results, though they have no doubt directed special attention to local matters. In 1885 the meeting between His Excellency Lord Dufferin and His Highness the Amír of Kábul at Ráwalpindi, and the incidents which occurred outside India at that time, evoked a marked display of loyal and warlike feeling in the Province, and the offers of services then made by the Ruling Chiefs of the Punjab resulted later in the formation of the Imperial Service Corps. During the following year Sir C. U. Aitchison served as President of the Public Service Commission, the recommendations of which have since led to various administrative reforms and to the introduction of the Provincial Service. The last work of his administration was to organize the foundation of the Aitchison (Chiefs') College at Lahore to provide a special education for the sons of the leading families of the Punjab.

1882 to 1892 continued.

62. Mr. (afterwards Sir) J. B. Lyall succeeded as Lieutenant-Governor in April 1887. During the summer of that year the important Acts which now regulate the land revenue and land tenures of the Province, and which had been prepared under Sir C. U. Aitchison, became law, and, in accordance with the wishes of the Government of India, a number of districts were at once put under settlement. The expeditions undertaken in 1888, 1891 and 1892 against the Black Mountain tribes and in 1891 against the Sámil Orakzais belong to the history of the North-West Frontier Province. In 1887 the special laws already in force in the frontier districts for the repression of crime were extended by a new Regulation empowering Deputy Commissioners in cases where judicial proof is deficient to pass sentences of imprisonment on the verdicts of Councils of Elders up to a maximum of seven years for murder and other heinous offences. In the spring of 1890 the Province was honoured by a visit of His Royal Highness the late Duke of Clarence, who laid the foundation stone of the Jubilee Museum building at Lahore, and in the following year His Imperial Highness the Cesarewitch also made a brief stay in the Punjab. His Excellency the Viceroy paid a visit to Patiála in October 1890 and confirmed the Mahárája in the full powers of the Ruler of his State; and the Rája of Kapurthala was invested with the same powers by the Lieutenant-Governor shortly afterwards. Previous to this the Imperial Service Corps of the leading Native States had been thoroughly re-organized and formed into a body of efficient troops. During 1890—92 various measures of improvement involving a considerable expenditure were carried out in the Police and Jail Departments, and large sums were spent upon providing additional and improved accommodation in Central Jails. Crime, which owing to many causes had shown a serious development up to 1888, slowly declined in the subsequent years of the decade. Throughout the principal part of the decade provincial finances were at a very low point, and except during the last two years of Sir James Lyall's administration the want of money constantly necessitated the postponement of important works. Among the buildings of note added to the Province within that period are the Chief Court, the Lady Aitchison Hospital and Lady Lyall Training Home, of which the foundation stones were laid by Their Excellencies Lady Dufferin and Lady Lansdowne, the Aitchison (Chiefs') College, the Jubilee Museum and the Albert Victor Memorial Wing of the Mayo Hospital. The extension of railways south of the Sutlej did much to protect that part from the danger of famine and

starvation. Sir James Lyall's term of office expired in March 1892, and he was succeeded by Sir Dennis Fitzpatrick, K.C.S.I., as Lieutenant-Governor of the Punjab. The most important engineering work of the time was the construction of the weir for the Chenab Canal, with which the development of water-works at Pesháwar, Ráwalpindi, Delhi and other less important places is worthy of mention. In 1884-85 sanction was accorded to the extension of the Railway system to the Sind-Ságar Doáb, and the Sind-Ságar State Railway was opened in 1886. In November 1887 His Excellency the Viceroy of India, Lord Dufferin, visited Dera Gházi Khan and bestowed khillats on certain Native gentlemen in Darbár. In 1891 effect was given to the proposals of the Punjab Government for strengthening the hands of the Deputy Commissioners of frontier districts in the discharge of their political duties by the appointment of special Political Assistants, and the addition was made to the staff of officers of the Dera Gházi Khan District of a 1st Class Assistant District Superintendent of Police and a Political Tahsíldár. The scheme for the revision and distribution of the new force of Border Military Police received the sanction of the Government of India in May 1892.

Pacification of the Biluchistan Border Tribes (1882–1892).

63. The decade saw a remarkable advance in the pacification of the tribes lying to the south of the Gomal Pass. During the early years the occupation of Quetta, Peshín and Thal-Chotiáli continued to contribute materially towards the establishment of an effective control over the hill clans on the Lower Deraját border, all cases between these tribes and those under the Agent, Governor-General, Bilúchistán, to whose charge the Khetráns were transferred in 1882-83, being settled at conferences held at Sibi and Fort Munro. The result of these meetings was that crime was suppressed, blood feuds kept under control and relations between the tribes themselves were maintained on a satisfactory basis. Since 1890, when the political control of the Bilúchistán Agency was extended over the Zhob Valley, the whole aspect of affairs has become changed, direct influence having been brought to bear on the hill country from both sides. By a Notification of the Government of India, issued in November 1889, the jurisdiction of the Deputy Commissioner of Dera Gházi Khan and the Commissioner of the Deraját was extended over the hill country of the tribes adjoining that district, who had hitherto been under their political control only, from the boundary of the district on the south to the boundary of the Bozdár tribe on the north. This measure has proved to be one of unqualified success and has materially contributed towards efficient tribal management on that part of the border; and it has since been extended to the Bozdár country also. Many burning inter-tribal boundary disputes have been settled with excellent effect. With a few exceptions, the behaviour of the tribes on the lower border of the Deraját during the ten years was for the most part satisfactory.

Frontier Affairs, 1892 to 1901.

64. The following decade, though peaceful in its opening years, was marked by momentous events. There was much trouble on the frontier, two severe famines afflicted a large area of the Province, noteably the south-east portion, and the plague which made its advent in 1897 in one of the tahsíls of the Jullundur District had last year spread to half the districts of the Punjab. The creation of a new administration for the management of the political affairs of the North-West Frontier was proclaimed a few months before the close of the decade. The event belongs to the history of the year 1901-02 and is noticed in one of the following sections. In consequence of this change the important events on the frontier which have occurred during the last ten years,—the delimitation of the spheres of British and Afghán influence, the expedition of 1894-95 against the Mahsúd Wazíris and the subsequent blockade of the same tribe in 1900-01, the Chitrál Relief Expedition of 1895, the general rising of the Pathán tribes from the Swát Valley to the Kurram in 1897, and the death of the Amír Abdul Rahmán in 1901,—though at the time they fell within the scope of the political control of the Government of the Punjab, have now ceased to belong to the history of the Province and pertain instead to that of the new Administration.

Trade (1892–1902).

65. These events have had an important influence upon the trade of the Province. The trade with Kábul has declined very greatly owing to the fiscal

policies of Russia and Afghánistán, but this decline has been counterbalanced by a large increase in the trade with Kashmir, part of which possibly finds its way to Central Asian regions formerly reached through Kábul. The Chitrál Relief Expedition by opening the road to Swát and Bajaur led to an enormous increase in the trade with those regions in 1896 which, though checked by the disturbances of 1897, was renewed in 1898 and became in 1899 one-third of the total value of the external land trade of the Province. The internal land trade as measured by the imports and exports by rail has increased enormously. Its average value for the five years ending 1892-93 was for imports 887 lakhs of rupees and for exports 695 lakhs. The corresponding figures for the year 1901-02 in which the total value of the trade reached the highest figure yet recorded were 1,548 and 1,552 lakhs respectively. The import trade was stimulated by famine in that year, but an increase in trade is the natural result of the growth of cultivation, the progress of the manufacturing industry, and the extension of our railway system. More than 3¼ million acres of waste land were brought under the plough during the decade.

New Railways.

66. The Delhi-Ambala-Kálka Railway was open at the commencement of the decade. The Southern Punjab Railway from Delhi to Ferozepore with its branch southwards to Baháwalpur *viâ* Samasata is now in full working, and a number of useful lines such as those from Mári to Attock, from Wazirabád *viâ* Lyallpur to Khánewál, from Nirwána to Kaithal, and from Ludhiána *viâ* Dhuri to Jakhal have been opened. The last-named line has opened up the States of Jínd and Máler Kotla to traffic and was constructed at the expense of the Darbárs of those States. Other Native States also have railway enterprise under consideration.

Native States.

67. The Native States of the Punjab have proved faithful too to their martial traditions, and the Patiála Lancers, the Jind, Nábha and Kapurthala Infantry and the Sirmur and Máler Kotla Sappers all took part in the operations on the Frontier in 1897 and 1898. All the Ruling Chiefs also came forward with offers of assistance in connection with the War in South Africa, which elicited a most noteworthy display of loyalty on the part of the whole of the Punjab. There were a large number of accessions during the decade due to the deaths of the late Chiefs of Farídkot and Sirmúr in 1898, of Baháwalpur, Pataudi and Jubbal in 1899, of Patiála in 1900 and of Keonthal in 1901. The deaths of the Mahárája of Patiála and the Nawáb of Baháwalpur terminated long periods of misrule and reckless expenditure in each case, and both States are now under management, the former by a Council of Regency, the latter by a British Superintendent. A Political Agent was appointed in 1901 for the control of the political relations of the Punjab Government with the three Phulkián States of Patiála, Jínd and Nábha. The first Ruling Chief in the Punjab to visit Europe was the Rája of Kapurthala who did so in 1892, spending the summer of 1893 there, and again in 1897 for the Jubilee of Her late Majesty Queen Victoria. This Rája's grandfather died when on his way to pay a visit to England. The only occasion in the decade on which the principal Ruling Chiefs were assembled together in Darbár was the visit of the Viceroy (Lord Elgin) to Lahore on November 30, 1894. They also visited Lahore, as is customary, when the office of Lieutenant-Governor was transferred in March 1897 from Sir Dennis Fitzpatrick to Sir William Mackworth Young and in March 1902 from the latter to Sir Charles Montgonery Rivaz.

Famines of 1896-97 and 1899-1900.

68. Agricultural conditions were prosperous until the year 1895, and there was a bumper rabi harvest in 1893. The monsoon terminated early in August in 1895, and there was a poor kharíf harvest followed by a deficient spring crop in 1896. The almost complete failure of the monsoon in the latter year caused widespread scarcity not only in the Punjab, but also in many other parts of India, and grain was procurable only at very high prices. The whole of the Delhi Division except Simla was affected, and also parts of the Jullundur, Lahore and Ráwalpindi Divisions. Famine relief works had to be undertaken on a large scale, the relief afforded being reckoned at 22⅔ million day-units and the maximum number under relief on any one day being 127,758.

Hissar was the most distressed tract and accounted for one-half of the total number relieved. The cost of relief operations was 22½ lakhs of rupees, revenue to the amount of 22 lakhs was suspended, and loans for the purchase of seed and cattle were granted to the amount of 11½ lakhs at the conclusion of the famine. From the Charitable Relief Fund subscribed in England and in India 12½ lakhs of rupees were allotted to the Punjab to meet claims beyond the scope of State aid. The kharíf harvest of 1897 and the rabi harvest of 1898 were all that could be desired, but the kharíf harvest of the latter year was poor, and when in 1899 the monsoon came to an untimely end famine was again in the land. Outside the Punjab it was more limited in its extent than it had been on the previous occasion, and consequently the price of grain did not rise very high. On the other hand, there was a very great scarcity of fodder, and the mortality among cattle was immense; and the distress among the people affected was more intense than in 1896-97. The maximum number relieved on any one day was 243,000 (reached in March 1900) and the total relief afforded is reckoned at 52 million day-units. The cost of relief operations was 48 lakhs of rupees, the land revenue suspended amounted to 44 lakhs and loans aggregating 19 lakhs were granted for the purchase of seed and cattle when favourable rains occurred in the autumn of 1900. The Charitable Relief Fund formed on this occasion allotted 12 lakhs of rupees for the wants of the Punjab. Hissar was, as before, the most deeply affected tract, and accounted for two-thirds of the number of persons relieved. The other tracts afflicted in 1896-97 suffered again in 1899-1900 and some other districts in addition. The relief measures undertaken were effectual in preventing death from actual starvation, but it was inevitable that the hard conditions of life should lead to an increased mortality, especially among the very young and the very old, and the number of deaths was in Hissar three times and in Rohtak twice the average number. In the other affected districts the normal was exceeded by varying proportions, all under 50 per cent.

Plague.

69. There was a bad epidemic of cholera in 1892, but the most malignant disease during the decade has been the plague, which unfortunately threatens to be even more destructive in the future than it has been in the past. It first appeared in October 1897 in the Jullundur District, whence it spread to parts of Hoshiárpur and of the Kapurthala State, disappearing in the spring of 1898 after causing 2,116 deaths out of 3,412 cases. It re-appeared in the same area in the winters of 1898-99 and 1899-1900, disappearing as before in the hot weather seasons, the number of cases being 425 and 859 and of deaths 232 and 530 respectively in these years. In the winter of 1900-01 the disease extended to the districts of Siálkot, Gurdáspur, Ludhiána, Ferozepore and Ambala, and there were 15,774 cases and 9,277 deaths. The following cold weather witnessed a still wider extension, and in the last three months of the calendar year 1901 there occurred 25,139 cases with 14,475 deaths.

Other Events (1892–1902).

70. Other important events of the decade—the creation of a Provincial Legislative Council, the colonization of the Rechna Doáb, the Land Alienation Act of 1900 the creation of the North-West Frontier Administration and the Census—are noticed under the appropriate heads in this report.

FORM OF ADMINISTRATION.

Form of Administration.

71. On the annexation of the Punjab in March 1849 a Board of Administration was constituted for the management of its affairs. The Board was abolished in February 1853, its powers and functions being vested in a Chief Commissioner, subordinate to whom a Judicial Commissioner and Financial Commissioner were appointed. After the transfer of the Delhi territory from the North-Western Provinces, the Punjab and its Dependencies were constituted a Lieutenant-Governorship, Sir John Lawrence, who had hitherto been Chief Commissioner, being appointed Lieutenant-Governor on January 1st, 1859. The succeeding Lieutenant-Governors were Sir Robert Montgomery, Sir Donald McLeod, Sir Henry Durand, Sir Henry Davies, Sir

Robert Egerton, Sir Charles Aitchison, Sir James Lyall, Sir Dennis Fitzpatrick, Sir Mackworth Young, and His Honour Sir Charles Rivaz, now in office.

Creation of a Chief Court.

72. In 1866 a Chief Court consisting of two Judges, a Civilian and a Barrister, was substituted for the Judicial Commissioner, and was constituted the final appellate authority in civil and criminal cases, with powers also of original criminal jurisdiction in cases where European British subjects are charged with serious offences, and of original civil jurisdiction in special cases.

Constitution of the Chief Court.

73. In the year 1869 a third Judge, a Civilian, was added to the Court. The constitution of the Chief Court subsequently remained unaltered until 1881 when the steadily increasing work made it necessary that some assistance should be given to the Judges. In October of that year the temporary appointment of a fourth Judge was accordingly sanctioned. Notwithstanding this addition to the Court, it was found in July 1882 that the number of civil appeals pending was considerably in excess of that on the corresponding date of the preceding year, and in the following November two additional Judges were employed. From time to time it was found necessary to retain the services of these additional officers, and in the latter half of the year 1886 the appointment of a fourth permanent Judge was sanctioned by Her Majesty's Secretary of State for India.

The Reorganization of the Punjab Commission.

74. The preceding brief account of the constitution of the Chief Court is incomplete, but it is desirable at this point to sketch the changes which have been made in the character of the Subordinate Judicial Courts, inasmuch as the nature and amount of the business before the Judges of the Chief Court have been directly influenced by the constitution of some of the Subordinate Civil Courts. Prior to the year 1875 the officers of the administration combined within the scope of their duties all judicial and executive functions. This arrangement had been in force since the annexation of the Punjab; it gave much vigour to the efforts of the earlier years of British rule towards reducing the Province to law and order, and contributed materially to their success. But the rapidly increasing calls on the time and energies of administrative officers that accompanied the development and advancing prosperity of the country during the decade following the Mutiny, and especially the increase of judicial work, pointed to the necessity for some steps towards the ultimate separation of judicial from executive duties, as in the Regulation Provinces. Accordingly in the year 1875 measures were introduced to relieve Tahsíldárs, Deputy Commissioners and Commissioners of the excess of judicial work which interfered with their efficiency. In each tahsíl, where the number of suits was large, a Munsif or Native Subordinate Civil Judge was posted; the judicial work of Deputy Commissioners was in twenty-three districts transferred to Judicial Assistants, and a Civil and Sessions Judge at Pesháwar, and two Additional Commissioners at Lahore and Jullundur, respectively, were appointed to aid in the disposal of civil and criminal appeals to Divisional Courts and of original criminal trials in serious offences. This scheme afforded considerable relief to District Officers who had arduous executive duties to perform, and provided for a time a sufficient agency for the disposal of the original civil litigation of the Province; but it afforded no relief to the Commissioners as a body, and in less than seven years experience showed that further changes were imperatively called for. After full and protracted discussion the following reforms were introduced in the year 1884:—The office of Settlement Commissioner was abolished and two Financial Commissioners were appointed instead of one, thus constituting a Board exercising powers very similar to those of the Revenue Board in the North-Western Provinces. The ten Commissionerships were reduced to six, those of the Hissar, Ambala, Amritsar and Mooltan Divisions ceasing to exist, and the districts of which they were composed being apportioned between the Divisions of Delhi, Jullundur, Lahore, Ráwalpindi and the Deraját. The area of the Pesháwar Division alone remained unchanged. The Sirsa District was abolished and divided between the districts of Hissar and Ferozepore. But the most marked alteration introduced in the administration of the Province was the reorganization of the judicial agency and the reform of the

appellate system. The thirty-one districts of the Province were divided into seven Civil Divisions, two Divisional Judges being appointed for each Division, except in the case of the Deraját, where the Commissioner, though no longer Sessions Judge, was required to do a certain amount of civil judicial work. In all other instances Commissioners were entirely relieved of civil and criminal judicial work, though not of revenue appellate business. The seven Civil Divisions were created mainly with a view to the prompt and in certain cases final disposal of civil appellate work, the two Judges of each Division sitting as a Bench for hearing appeals. For criminal business the Province was divided into ten Sessions Divisions, in three of which Joint Sessions Judges were appointed in addition to the Sessions Judge. In fourteen out of the thirty-one districts special officers were appointed as District Judges: in the other seventeen districts the Deputy Commissioners became the District Judges, but in eleven of these Subordinate Judges were appointed with original and appellate powers to relieve the Deputy Commissioners of all civil judicial work except powers of control and the distribution of business. In the remaining six districts the Deputy Commissioners were expected to hear civil appeals, but not to decide original civil suits. Thus throughout the Province as a whole considerable steps were taken towards a complete separation of judicial and other functions, so far as concerned the more important officers engaged in the administration. As regards the Assistant and Extra Assistant Commissioners, the mass of these remained available for executive, judicial, revenue and administrative purposes, but as far as has been practicable one officer has been told off in each district for employment specially on revenue business. The changes above indicated were introduced not only with the object of improving the judicial administration and of giving revenue and executive officers more leisure for carrying out their duties, but also with a view to removing the great stagnation of promotion which for some years had very injuriously affected the members of the Punjab Commission as compared with Civil Servants in other Provinces.

Judicial Staff.

75. The reorganization described in the preceding paragraph was introduced in November 1884, legal effect being given to it by Act XVIII of that year. The seven Civil Divisional Courts consisting of two Judges in each Court were created on November 1st. In April 1885 the Judges of the Chief Court represented that the Divisional Courts were quite unable to cope with the number of appeals coming before them, and before the close of the year it was found necessary to discontinue the Bench system and to substitute thirteen Divisional Courts with a single Judge in each; and such was the state of arrears in the Courts that six additional Divisional Judges had to be temporarily appointed to clear off the accumulations. From that time onwards the thirteen Judges were generally able to dispose satisfactorily of the work coming before them, although in some Divisions temporary arrangements sometimes had to be made for giving relief. The number of Judges in the Chief Court was unaffected by the reorganization of 1884; but, as has already been remarked, a fourth Judge was permanently appointed in 1886. The abolition of the Bench system in the Divisional Courts added to the number of appeals preferred to the Chief Court, and so congested became the state of work in it that for some time it was necessary to employ no less than six Judges, while in 1888 the Punjab Courts Act of 1884 had to be amended so as to diminish the appellate business of the highest tribunal in the Province. Although it was then found possible to reduce the number of Judges to five, arrears again became marked in 1895 and 1896, and at the end of that year the strength of the Court was again raised to six (four permanent and two temporary) Judges. In 1899 the law of appeal in the Punjab Courts Act was further amended and the work before the Chief Court now shows signs of diminishing, and it is hoped that one of the two temporary Judges can before long be dispensed with.

Financial and Settlement Commissioners.

76. In 1897 the constitution of the highest office in the Revenue Department also underwent revision and the appointment of Second Financial Commissioner created in 1884 was abolished, the appointment of Settlement

Commissioner being revived in its place in order that adequate supervision of settlement operations might be secured.

Administrative charges.

77. The changes in the administration, necessitated by the withdrawal from the Punjab of the districts included in the North-West Frontier Province, and the re-arrangement of civil divisions and districts of this Province consequent thereon, are noticed in paragraphs 124 to 127 following. Briefly, the Punjab has now 5 Commissioners' Divisions and 27 districts under Deputy Commissioners. The number of Judicial Divisions is 12, each being the charge of a Divisional and Sessions Judge. In most districts there are District Judges distinct from the Deputy Commissioners, and the former have the entire charge of the arrangements for the disposal of civil judicial work in these districts. In each of the other districts the Deputy Commissioner is *ex-officio* District Judge for administrative purposes, but there is also an Additional District Judge or a Subordinate Judge to relieve him of the actual trial of civil cases, original or appellate. The number of such districts depends on the number of fully qualified officers who are available for employment as District Judge. Only eight District Judgeships are graded posts in the Punjab Commission carrying special rates of pay; the remainder are held by Assistant Commissioners or members of the Punjab Civil Service.

The Provincial Service.

78. The investigations made by the Public Service Commission as to the expediency of utilizing the services of Natives of India more freely in the civil administration of the country led in 1893 to the constitution of a Provincial Civil Service, which, while it absorbed the previously existing establishment of Extra Assistant Commissioners, arranged them in new grades. There are now seven grades of Extra Assistant Commissioners paid Rs. 250, 300, 400, 500, 600, 700 and 800 per mensem respectively. The chief feature of the re-organization of the Provincial Service is that a certain number of appointments for which members of the Indian Civil Service or Military Officers were formerly recruited can now be held by members of the Provincial Service. These are two appointments of Divisional Judge, two of Deputy Commissioner, two of District Judge, two of Settlement Officer, and one of Junior Secretary to Financial Commissioner, in addition to three appointments of Assistant Commissioner which are to be amalgamated with the existing grades of Extra Assistant Commissioner. It has been held that till the claims have been satisfied of officers of the Punjab Commission recruited before the transfer of these appointments to the Provincial Service was decided on, the transfer cannot be carried out in its entirety. It has also been decided that among those transferred or "listed" appointments must be included the appointments held by Statutory Civilians serving in the Commission. The listed appointments in fact will be the means of giving to the more able and deserving members of the Provincial Service the responsible employment in the administration of the country which the Statutory Service was originally designed to supply to selected natives of India. The number of Statutory Civilians in the Punjab is five, and they hold of the listed appointments the two Deputy Commissionerships, the two District Judgeships and one Divisional Judgeship. The remaining Divisional Judgeship, one appointment of Settlement Officer and one appointment of Assistant Commissioner, 3rd Grade, which has been amalgamated with the 6th Grade of Assistant Commissioner, were at the end of 1901 held by members of the Provincial Service, and the remaining listed posts had not then under the principles explained above become available for transfer to the Provincial Civil Service.

LAND TENURES.

Land Tenures.

79. The subject of land tenures, in a Province of which the various parts differ so widely both physically and in respect of the races which inhabit them as in the Punjab, is one which it is almost impossible to treat satisfactorily in the brief space that can be allotted to it in an Administration Report. The Settlement Reports of the Province contain full and

minute information on the subject, and the student of land tenures in the Punjab can obtain a thorough knowledge of them only by a careful study of these Reports. This is particularly the case as regards the land tenures of the districts in the south-west of the Province, in which examples of peculiar tribal tenures are to be met with which can hardly be explained with brevity and at the same time with correctness. These are generally tinged with a feudal spirit, and often take the form of rights of overlordship, or claims to receive services retained by tribes which are or were once dominant over other bodies of cultivators who are now sub-proprietors.

Bibliography.

80. A fuller sketch of the general tenures of the Province than can be conveniently embodied in the pages of an Administration Report will be found in the Directions to Revenue Officers, edited by Mr. Barkley (pages 39—52), and in Mr. Baden Powell's Manual of the Land Systems of British India (Volume II, pages 609—726), Mr. Tupper's Customary Law (Volume II, pages 10—37), Sir W. H. Rattigan's Digest of Customary Law (Chapters IV, VII, VIII and IX), and Rattigan's and Roe's Tribal Law in the Punjab (pages 6—32).

Proprietorships.

81. Taking the Province as a whole it may be estimated that about one-sixth of the area is the property of Government, the remaining five-sixths belonging to private owners. A large part of the area belonging to Government is so situated that it cannot be brought under cultivation without the aid of extensive works of irrigation. One of these, the Chenab Canal, is now approaching completion and already irrigates over a million and a half acres of what was formerly Government waste land. Colonization on the Government lands watered by the Jhelum Canal is just about to commence, and two other large projects for irrigating Government waste are in contemplation; the Sind-Ságar Doáb Canal and the Lower Bári Doáb Canal. Large areas of Government waste in the hills and elsewhere which are unsuited for cultivation are preserved as forest or grazing lands, and others in addition to the colony lands are held under lease from Government for purposes of cultivation. The proportion of cultivated land owned by Government to that owned by private individuals is at present about one to twelve.

Land Revenue.

82. All land is held subject to the payment of land revenue to the State, or to grantees holding from the State, unless such liability has been redeemed or compounded for, and this revenue at present exceeds Rs. 2,41,76,000 per annum, of which more than Rs. 26,28,000 are received by assignees who had, on various grounds, claims to consideration from Government. In some cases these assignments are of the nature of the release of the revenue of lands belonging to the assignees, but have no necessary connection with proprietary right; and in the majority of instances the grantees are merely entitled to receive the revenue payable to Government, the amount of which is limited in the same way as if it were paid direct to Government.

Succession to heritable assignments.

83. The ordinary rule of succession which obtains in the Punjab is one by which all male issue of a deceased holder of ancestral property divide that property *per capita* and equally. The effect of this rule, as applied to the succession to an assignment of land revenue, had threatened to result in such minute sub-division of the original assignment as to seriously imperil its political utility. An Act has accordingly been passed (The Punjab Descent of Jágírs Act, No. IV of 1900) which enables the Local Government to take steps with a view to confining the succession to such assignments to a single heir as impartible property.

Rights of alienation.

84. While the unhampered exclusive use of property in a man's possession, whether ancestral or acquired, for his lifetime, with a free disposal of the income, is not denied, freedom of alienation whether by gift or bequest is, in regard to ancestral immoveable property, subject in most cases to certain restrictions. The prevailing sentiment is that as regards such property in the hands of any individual, there exists some sort of residuary interest in all the descendants of the first owner, or body of owners, however remote and

contingent may be the probability of some among such descendants ever having the enjoyment of the property. In short, the owner in possession is not regarded as having the sole interest in the property and power to dispose of it, so as to defeat the expectations of those who are deemed to have a residuary interest. It is, however, recognised that in case of legitimate necessity the possessors of the residuary interest have no power to object to an alienation of ancestral immoveable property by the owner in possession.

In addition to the above-mentioned customary restraints on the full power of an owner to deal with property in his possession there exists also now a statute which has been enacted to restrict the alienation of agricultural land in the Punjab. The passing of the Alienation of Land Act in 1900 forms an epoch in the history of the Province. The fatal facility with which the agricultural tribes of the Punjab had got into the clutches of money-lenders, resulting in the course of time in the reduction in their status from proprietors to tenants, had long been marked and remedies discussed for arresting this tendency. The outcome of years of discussion was the Alienation of Land Act of 1900 which limits the free transfer of landed property by persons who are declared to be members of agricultural tribes to members of the same tribe or of a tribe in the same group and to "agriculturists," an "agriculturist" meaning a person holding agricultural land either in his own name or that of an ancestor in the male line as an owner or hereditary tenant from the time of the first regular settlement of the district in which the land is situate or from such other date as Government may determine. Transfers of land by such people to others not so specified require the consent of the Deputy Commissioner, for whose guidance explicit rules have been laid down. The Act also places restrictions on mortgages to non-agriculturists. It is yet too soon to form an accurate appreciation of the effect of the Act, but as far as experience goes it appears to be generally beneficial, and although it places considerable restrictions on the rights of property hitherto enjoyed by zamíndárs, its general effect on credit appears to have been wonderfully small.

Rights of Pre-emption.

85. The great mass of the landed property in the Punjab is held by small proprietors, who cultivate their own land in whole or in part. The chief characteristic of the tenure generally is that these proprietors are associated together in village communities, having to a greater or less extent joint interests and, under our system of cash payments limited so as to secure a certain profit to the proprietors, jointly responsible for the payment of the revenue assessed upon the village lands. It is an incident of the tenure, that if any of the proprietors wishes to sell his rights, or is obliged to part with them in order to satisfy demands upon him, the other members of the same community have a preferential right to purchase them at the same price as could be obtained from outsiders.

A Bill is now pending in the Local Legislature to codify the law as to pre-emption. It is one of the corollaries to the passing of the Punjab Alienation of Land Act, its chief aim being to prevent a non-agriculturist when he has once gained a footing in a village community from buying up other shares in the village as they come into the market and so expropriating the true agriculturist and breaking up the village community.

Zamindari Tenures.

86. In some cases (technically known as zamíndári tenures) all the proprietors have an undivided interest in all the land belonging to the proprietary community; in other words, all the land is in common, and what the proprietors themselves cultivate is held by them as tenants of the community. Their rights are regulated by their shares in the estates, both as regards the extent of the holdings they are entitled to cultivate, and as regards the distribution of profits, and if the profits from land held by non-proprietary cultivators are not sufficient to pay the revenue and other charges, the balance would ordinarily be collected from the proprietors according to the same shares.

Separate Holdings.

87. It is, however, much more common for the proprietors to have their own separate holdings in the estate, and this separation may extend

so far that there is no land susceptible of separate appropriation which is not the separate property of an individual or family. In an extreme case like this the right of pre-emption and the joint responsibility for the revenue, should any of the individual proprietors fail to meet the demand upon him, are almost the only ties which bind the community together. The separation, however, generally does not go so far. Often all the cultivated land is held in separate ownership, while the pasture, village site, roads, ponds or tanks, &c., remain in common. In other cases land cultivated by tenants is the common property of the community, and it frequently happens that the village contains several well-known sub-divisions, each with its own separate land, the whole of which may be held in common by the proprietors of the sub-division, or the whole may be held in severalty, or part in separate ownership and part in common.

Pattidari and Bhaiachara Tenures.

88. In those communities (technically known as bháiachára and pattidári) with partial or entire separation of proprietary title the measure of the rights and liabilities of the proprietors varies very much. It sometimes depends solely upon original acquisition and the operation of the laws of inheritance; in other cases definite shares in the land of a village or sub-division different from those which would result from the law of inheritance have been established by custom; in other cases reference is made not to shares in the land, but to shares in a well or other source of irrigation; and in the majority of cases in the east and south-east of the Punjab no specified shares are any longer acknowledged, but the area in the separate possession of each proprietor is the sole measure of his interest. Where the rights and liabilities are determined according to certain known shares the tenure is known as pattidári, where possession is the measure of each man's right and liability it is called bháiachára. It is sometimes the case, however, that while the separate holdings do not correspond with any recognized shares, such shares will be regarded in dividing the profits of common land, or in the partition of such land, and wells are generally held according to shares, even where the title to the land depends exclusively on undisturbed possession.

Village Communities.

89. Throughout a great part of the Province the organization of the proprietors of land into village communities has existed from time immemorial, and is the work of the people themselves, and not the result of measures adopted either by our own or by previous Governments. Indeed, these communities have sometimes been strong enough to resist the payment of revenue to the Government of the day, and before our rule nothing was more common than for them to decide their disputes by petty wars against each other, instead of having recourse to any superior authority to settle them. But in some localities the present communities have been constituted from motives of convenience in the application of our system of settlement. Thus in the Simla hills and in the more mountainous portions of the Kángra District the present village communities consist of numerous small hamlets, each with its own group of fields and separate lands, and which had no bond of union until they were united for administrative purposes at the time of the land revenue settlement. In the south-western districts, again, while regular village communities were frequently found in the fertile lands fringing the rivers, all trace of these disappeared where the cultivation was dependent on scattered wells beyond the immediate influence of the river. Here the well was the true unit of property, but where the proprietors of several wells lived together for mutual protection or their wells were sufficiently near to be conveniently included within one village boundary, the opportunity was taken to group them into village communities. These arrangements were made possible by the circumstance that the village community system admits of any amount of separation of the property of the individual proprietors, and by care being taken that in the internal distribution of the revenue demand it should be duly adjusted with reference to the resources of the separate holdings. They also in general involved the making over in joint ownership to the proprietors of the separ-

ate holdings of waste land situate within the new boundary, in which no private property had previously existed.

Quit-rent Payments.

90. In some cases the village communities, while holding and managing the land as proprietors (adna malik), are bound to pay quit-rent to the superior proprietors (ala malik), under whom they hold. The settlement is now required to be made in such circumstances, with the communities in actual possession of the land, who pay the land revenue to Government and the quit-rent to the superior proprietor, but in special cases the Financial Commissioner may order the settlement to be made with the superior proprietor. The amount which the superior proprietor is entitled to collect is determined at Settlement as well as the amount of the land revenue demand.

Limited Proprietors.

91. There are sometimes also proprietors holding lands within the estates of village communities, but who are not members of the communities, and are not entitled to share in the common profit, nor liable for anything more than the revenue of their own lands, the village charges ordinarily paid by proprietors, and the quit-rent, if any, payable to the proprietary body of the village. The most common examples of this class are the holders of plots at present or formerly revenue-free, in which the assignees were allowed to get proprietary possession in consequence of having planted gardens, or made other improvements, or because they had other claims to consideration on the part of the village community. In the Ráwalpindi Division also it was thought proper to record old-established tenants, who had never paid anything for the land they held but their proportion of the land revenue and village expenses, and had long paid direct to the Collectors of the revenue, but were not descended from the original proprietary body, as owners of their own holdings, while not participating in the common rights and liabilities of the proprietary community. Except in the Jhelum and Ráwalpindi Districts, where a small quit-rent was in some cases imposed, these inferior proprietors, called "malik kabza," were not required to pay anything in excess of their proportion of the Government revenue and other village charges. In Gujrát, at the time of the first regular settlement, this class held no less than 10 per cent. of the total cultivated area, and in Ráwalpindi it paid 9 per cent. of the revenue. In Ráwalpindi the persons recorded as proprietors of their own holdings only were in some cases the representatives of the original proprietary body, jágírdárs having established proprietary rights over what were formerly the common lands of the village.

Chakdars and Sillahdars.

92. In Mooltan, Muzaffargarh, Dera Gházi Khan, Jhang, and in parts of some other districts in the south-west of the Punjab, a class of proprietors, distinct from the owners of the land, is found under the name of chakdárs, sillahdárs, or kasúrkhwárs. These are the owners of wells, or occasionally of irrigation channels, constructed at their expense in land belonging to others. They possess hereditary and transferable rights, both in the well or irrigation-channel and in the cultivation of the land irrigated from it, but may be bought out by the proprietor repaying the capital they have expended. They are generally entitled to arrange for the cultivation, paying a small fixed proportion of the produce to the proprietor, and being responsible for the Government revenue. Sometimes, however, the management of the property has been made over to the proprietor, who pays the Government revenue, and the chakdár receives from him a fixed proportion of the produce called "hakk kasúr," or a third party may manage the property, paying the Government revenue and the hakk kasúr, out of which the chakdár pays the proprietor's allowance. In Ráwalpindi also there is a small class of well proprietors in the position of middlemen, paying cash rent to the owner of the land and receiving a grain rent from the cultivator.

Tenants' Tenures.

93. Tenancies in the Punjab naturally fall into four great divisions, *viz*, (1st) those which are held by tenants with rights of occupancy under the Punjab Tenancy Act, (2nd) those which are held under decree of court, lease, or other special agreement, (3rd) those which are held under Act III

of 1893, the Government Tenancies (Punjab) Act, and (4th) those which are held as tenancies-at-will. These groups may be further sub-divided by the nature of the rent paid, or in the case of tenants with rights of occupancy according to the particular section of the Punjab Tenancy Act under which these rights are held.

Description of tenancies.

94. The rents of tenants with rights of occupancy are liable to enhancement or reduction in accordance with fixed rules which are embodied in the Tenancy Act. And so long as the appointed rent is paid, the occupation of the tenant cannot be disturbed. This tenant right is inheritable by male lineal heirs, by the widow and by male collateral heirs, provided that in the case of the latter the common ancestor occupied the land; and subject to certain restrictions it is also transferrable, although in practice it is not very often actually transferred. The widow inherits only a life interest in her deceased husband's holding. Moreover, next to the proprietors, tenants with a right of occupancy have a pre-emptive claim to purchase any land offered for sale in the village in which their holdings are situated. The Act of 1893 mentioned above is an enactment applicable only to lands owned by Government, which enables Government to receive cultivators as tenants on certain stated conditions without the necessity of embodying such conditions in a formal deed of agreement in each case. The provisions of the Punjab Tenancy Act (XVI of 1887) do not override the special conditions applicable to such tenants. The operation of Act III of 1893 is wide already and will be wider still as colonization spreads. Under Native Governments and in the early days of British rule over a great part of the Punjab there was little or no distinction between a lease and a grant of proprietary right. The reclamation of the waste, which throughout wide areas followed upon the establishment of peace and order, was in no small measure due to the liberal and at the time appropriate policy which rewarded the industry and enterprise of early settlers by the grant of a proprietary status for almost nothing but their outlay on the land and their labour in clearing it. A time then came when, except where the conditions of agriculture were unfavourable or the means of communication very bad, it became unnecessary to offer proprietary right as an inducement to settle, and about the same time the first of the colonization schemes was initiated. The old policy of inducing reclamation by the grant of proprietary rights has thus given way to the new policy of colonizing the waste by means of Government canals. The varieties of tenure which have been created under Act III of 1893 fall mainly into three classes,—(1) peasant tenancies for a term of years, usually 20 years, in which case the area of each tenancy does not usually exceed one square or some 28 acres, (2) yeoman tenancies of somewhat larger area than the peasant grants, which carry occupancy rights acquired by the payment of a small sum per acre by way of *nazrána*, and (3) capitalist tenancies of still larger area than yeoman grants which besides carrying occupancy rights on payment of *nazrána* carry the right to purchase proprietary rights in the tenancy after the lapse of a certain number of years on favourable terms. In addition to the above-mentioned three main classes there are other special forms of tenure, such as that in which the tenant binds himself to keep up so many camels and to become a member of a camel corps, and on the Jhelum Canal the experiment is to be tried of giving out land to tenants on horse-breeding conditions with a view to raising the standard of horses in the Punjab and providing an adequate supply of animals suitable for army remounts. Tenants-at-will are so far protected that they cannot be ejected save after issue of notice through a Court of law. These notices are only issued at particular seasons of the year, and opportunity is given to any tenant who wishes either to contest his liability to ejectment or to claim compensation for unexhausted improvements as a condition precedent to relinquishment of the land to do so. The right to compensation is also regulated by fixed rules embodied in the Tenancy Act.

Cultivating Occupancy.

95. The exact area held by owners according to latest statistics is 44·4 per cent. and by tenants 55·6 per cent. of the total cultivated area. It is,

however, to be remembered that many persons who are themselves proprietors hold lands separately in tenancy, and figured statements thus return tenants with relative exaggeration. The following statistics are the latest available on the subject :—

Details.			Number of holdings.	Area in acres.
Total cultivated area			8,516,375	25,363,161
Area cultivated by owners			3,102,979	11,282,286
Area cultivated by tenants free of rent or at nominal rent			395,827	280,911
Area cultivated by tenants paying rents	With right of occupancy.	Paying at revenue rates with or without malikana	672,879	1,772,148
		Paying other cash rents	110,674	437,633
		Paying in kind with or without an addition in cash	156,643	456,699
	Without right of occupancy.	Paying at revenue rates with or without malikana	470,690	1,431,159
		Paying other cash rents	925,699	2,579,289
		Paying in kind with or without an addition in cash	2,680,984	7,123,036
		Total held by tenants paying rents	5,017,569	13,799,964

96. The following statistics relate to the rents paid by tenants-at-will :— Rents.

Details.			Area in acres. Irrigated.	Area in acres. Unirrigated.
Detail of rents and area on which paid by tenants-at-will.	Rents in kind.	(1) Zabti rents	13,221	27,170
		(2) Half produce or more	1,187,197	1,704,771
		(3) Two-fifths and less than half	189,891	305,204
		(4) One-third and less than two-fifths	901,553	939,034
		(5) Less than one-third	1,104,679	489,639
		(6) By fixed amount of produce	223,332	37,345
		(7) Total area under rents in kind	3,619,873	3,503,163
	Cash rents.	(8) Total paying at revenue rates with or without malikana	921,840	509,319
		(9) Total paying other cash rents	766,660	1,812,629
		(10) Total cash rents paid on area entered in (9)	9,625,559	

97. In the tables contained in the foregoing paragraphs the land tenures of the Province are classified in the manner best calculated to convey information of value to officers engaged in the assessment and collection of land revenue and generally in the administration of the land. The distinctions between zamíndári, pattídári and bhaiáchára villages have in this Province little significance from an administrative point of view. In compliance, however, with the orders contained in paragraph 10 of the Government of India, Home Department, letter Analysis of tenures.

No. 3068, dated 30th September 1902, the following additional statistics of tenures are given :—

1	2	3	4	5	6	7	8
Description of villages according to revenue paid by them.	Tenure.	Number of estates.	Number of villages.	Number of holders or share-holders.	Gross area.	Average area of each estate.	Average assessment of each estate.
Villages paying Rs. 5,000 to Rs. 50,000.	1. Zamíndári ...	4	4	207	19,610	4,902	6,409
	2. Pattídári and bhaiáchára.	1,191	262	226,729	2,973,200	2,496	1,496
Villages paying Rs. 100 to Rs. 5,000.	1. Zamíndári ...	2,065	2,050	30,688	2,946,160	1,427	439
	2. Pattídári and bhayáchára.	34,711	29,402	3,197,472	48,083,861	1,385	645
Villages paying less than Rs. 100.	1. Zamíndári ...	1,047	1,035	15,138	817,191	781	42
	2. Pattídári and bhaiáchára.	2,248	2,204	90,496	2,455,659	1,092	55
	Leases from Government without right of ownership.	1,641	1,618	66,830	2,501,417	1,524	825
	Total ...	42,907	36,575	3,627,560	59,797,098	1,394	614
ADDENDA.							
A.—Holdings included in the above held wholly or partially free of revenue, viz.,—							
1. In perpetuity free of conditions		...	...	43,889	3,385,729	...	1,600,583
2. „ „ subject to conditions		...	...	31,094	2,029,667	...	765,961
3. For life or lives		...	...	18,993	630,944	...	301,744
4. At pleasure of Government		...	...	32,727	244,848	...	410,569
5. Up to the time of Settlement		...	...	15,550	839,201	...	85,878
Total of these holdings ...		...	...	142,253	7,130,389	...	3,164,735
B.—Lands included in the above of which the ownership is encumbered by usufructuary mortgages.		...	...	988,468	Total ... 5,681,274 / Of which cultivated. 3,781,708	...	...

SYSTEM OF SURVEY AND SETTLEMENTS.

Surveys.

98. The survey of estates as a part of settlement operations is carried out by the Patwáris or Village Accountants. The method now adopted in all plain tracts is that known as the square system of measurement. Before the plotting of the fields is commenced, the whole area of the estate is carefully marked out into squares of equal size, and the field map is filled in by plotting the distances of the corners of the fields from the sides and diagonals of these squares. It is found that the Patwáris lay out the squares with great accuracy, and the resulting field map is not only correct enough for all the purposes of the revenue administration, but is generally found sufficiently accurate to be utilized after reduction by the Imperial Survey Department in the preparation of topographical survey maps. The maps and records-of-rights are kept up to date by the ordinary district establishment, and it is hoped that remeasurement will cease to be a necessary feature of settlement operations. An attempt is now being made to revise the map and record in the Attock Tahsíl without making a complete remeasurement, and if the experiment, which appears promising, proves successful, it will be carried out in other districts coming under resettlement, and is likely to result in a considerable diminution in the duration and cost of re-assessment operations. The system of survey is further referred to in the following Chapter in describing the duties of the Land Records Agency.

Settlements.

99. The history, principles and methods of survey and settlements in the Punjab are fully dealt with in the recently published Punjab Settlement Manual.* The assessments of all estates in the Punjab, with the exception of a few of which the revenue has been redeemed by the proprietors, are revised from time to time. The term of settlement adopted in the case of most districts recently brought under re-assessment has been twenty years, and under present instructions no re-assessment is to be fixed for more than twenty years except with the permission of the Government of India. The rule laying down the standard of assessment is as follows:—"The assessment of an estate will be fixed according to circumstances, but must not exceed half the value of the net assets," a phrase which is defined as meaning "the average surplus which the estate may yield after deduction of the expenses of cultivation, including profits of stock and wages of labour." When the rents are fair competition rents, 50 per cent. of the rental is considered to be the measure of the half assets share. In practice it is recognized that there are many reasons which may justify a Settlement Officer in assessing below the maximum standard, but he is required to state as accurately as possible what the half net assets are, and to give good reasons for any proposal to fix the Government demand much below that standard. For the eleven districts, the settlements of which have been completed in the last ten years, the proportion borne by the new assessment as actually announced to the estimated half net assets has averaged about 75 per cent., and has varied from 52 per cent. in the Frontier district of Peshawar to 92 per cent. in the well-developed district of Mooltan. No particular fraction of the *gross produce* is prescribed as the limit of the land revenue demand, the only limit being that just mentioned, *viz.*, half the value of the net assets. The actual assessment nowhere exceeds one-fifth of the gross produce. It is more often equal to one-seventh, one-eighth or even a smaller fraction of the gross produce. There is a marked tendency in the recent assessment policy of the Punjab to assess irrigation from wells with greater leniency than before, in consideration of the expenditure of capital and labour in constructing and working the well, and also, in the case of lands cultivated wholly or mainly by means of river-spill or canal-irrigation, to substitute for the system of a fixed assessment, realisable (subject to suspensions) in good and bad years alike, the system of an assessment which shall vary from year to year with the area of crops actually harvested within the year. In the recently settled district of Mooltan, of the total new assessment of 13 lakhs, 10 lakhs are realisable on the latter system, and almost the whole of the remainder is charged on wells, with the proviso that whenever any well goes out of use the assessment leviable on it shall be at once remitted.

* By J. M. Douie, I.C.S., published at the *Civil and Military Gazette* Press, Lahore, 1899.

CIVIL DIVISIONS OF BRITISH TERRITORY

100. A re-arrangement of Civil Divisions was necessitated by the exclusion of the North-West Frontier Districts. The changes introduced, which are noticed in the Section "Changes in the Administration," are incorporated in the following table:—

Names of Commissioners' Divisions.	Names of Executive Districts.	Area in square miles.	Population, 1901.	Names of Civil and Sessions Divisions.	Districts comprised within the Division.
DELHI	Hissar	5,217	781,717	DELHI	Delhi.
	Rohtak	1,797	630,672		Gurgaon.
	Gurgaon	1,984	746,208		Rohtak.
	Delhi	1,290	689,039		Karnál.
	Karnál	3,153	883,225	AMBALA ...	Ambala.
	Ambala	1,851	815,880		Simla.
	Simla	101	40,351		Ludhiána.
JULLUNDUR ...	Kángra	9,978	768,124	JULLUNDUR ...	Jullundur.
	Hoshiárpur	2,244	989,782	HOSHIARPUR ...	Hoshiárpur.
	Jullundur	1,431	917,587		Kángra.*
	Ludhiána	1,455	673,097	FEROZEPORE ...	Ferozepore.
	Ferozepore	4,302	958,072		Hissar.
LAHORE	Lahore	3,704	1,162,109	AMRITSAR ...	Amritsar.
	Amritsar	1,601	1,023,828		Gurdáspur.
	Gurdáspur	1,889	940,334	SIALKOT ...	Sialkot.
	Montgomery ...	4,771	497,706		Gujránwála.
	Siálkot	1,991	1,083,909	LAHORE ...	Lahore.
	Gujránwála ...	3,198	890,577		
RAWALPINDI ...	Ráwalpindi	4,850	930,535	MOOLTAN ...	Mooltan.
	Jhe'um	3,995	594,018		Dera Gházi Khan.
	Gujrát	2,051	750,548		Montgomery.
	Shahpur	4,840	524,259		Muzaffargarh.
MOOLTAN ...	Mooltan	6,107	710,626	RAWALPINDI ...	Ráwalpindi.
	Muzaffargarh ...	3,635	405,656	JHELUM ...	Jhelum.
	Jhang	6,652	1,002,656		Gujrát.
	Miánwáli	7,855	424,588	SHAHPUR ...	Shahpur.
	Dera Gházi Khan ...	5,330	471,149		Miánwáli.
					Jhang.
	Total Punjab ...	97,272	20,306,252		

*The Kulu Sub-Division has been notified as a separate Civil Division, but the Divisional Judge of Hoshiárpur is at present the officer in charge.

DETAILS OF THE LAST CENSUS—TRIBES AND LANGUAGE.

Castes and Tribes.

101. The table below shows the numbers belonging to each caste or tribe which comprises 1 per cent. or more of the total population in the Punjab :—

Numbers of the principal Castes and Tribes in the Punjab.

Castes.	Persons in both Provinces (old Punjab).		Persons	Proportion per *mille* in 1901
	1891.	1901.	In Punjab as now constituted.	
1	2	3	4	5
All castes	25,130,127	26,880,217	24,754,737	1,000
Ját	4,625,523	5,022,739	4,941,658	199·6
Rájpút	1,790,359	1,874,620	1,854,500	74·9
Chamár	1,188,018	1,213,019	1,208,434	65·6
Mochi	407 634	437,762	414,996	
Chuhra	1,224,966	1,327,325	1,304,661	52·7
Brahman	1,122,709	1,138,023	1,122,642	45·4
Pathán	970,466	1,147,676	263,897	10·7
Tarkhán	664,260	721,597	681,300	41·7
Lohár	352,780	378,770	351,458	
Aráín	896,314	1,010,226	1,006,784	40·7
Jhínwar	473,094	464,335	459,776	31·2
Máchhi	201,307	240,900	236,384	
Mallah	93.858	81,883	76,029	
Gujar	711,800	739,622	631,524	25·5
Arora	667,197	721,571	652.624	26·3
Juláha	670,345	695,216	656,887	26·5
Awán	608,051	662,118	421,112	17·0
Kumhár	540,759	589,222	569.115	23·0
Teli	308,955	331,291	321,505	18·6
Penja and Qassáb	136,288	148,627	139,305	
Khatri	447,933	470,076	436 472	17·6
Bania	442.495	451,966	451,625	18·2
Baloch	416,802	491,789	467,843	18·9
Dhobi and Charhoa	158,876	163,602	147,253	15·3
Chhímba	144,835	151,982	151,517	
Lilári, Rangrez and Darzi	83,392	87,310	80,334	
Nái	383,107	400,602	376,238	15·2
Kanet	369.754	389,861	389,857	15·7
Shekh	366.963	407,005	374,357	15·1
Faqír	315,305	389,250	385,741	15·6
Sayad	289,449	315,032	238,227	9·6
Mirási	245,214	258,733	247 701	10

Caste Systems.

102. The Punjab caste system presents several very distinct types of social structure, but, broadly speaking, it may be said that in the east of the Province the social system closely resembles the caste system of lower India, though within the caste are various groups, sectarian, occupational and tribal, which render the caste a singularly complex social unit. In the west of the Province the social organization is far simpler, the unit being the tribe, and the caste, as an occupational unit, being unknown. As a rough generalization it may be said that in the east of the Punjab marriage is not permitted outside the caste which is thus an endogamous unit, whereas in the west the tribe is bound by no such restriction. The two social types of greatest administrative importance are described below:—

Rajput Social System.

The oldest type of Rájpút society is probably to be found in the Kángra hills, where the Rájpút tribes are split up into several social groups of different status, status depending on various considerations. Generally speaking no Rájpút may pursue any menial occupation or that of a trader or artizan, and among the higher groups it is forbidden to handle the plough. Thus to a great extent status depends on occupation. It also depends on the observance of social rules, especially the avoidance of widow re-marriage, the practice of which involves instant degradation to a rank below that of the true Rájpút.

Jat Social System.

Amongst the Játs widow re-marriage is, with comparatively few exceptions, not prohibited, and agriculture is essentially their occupation.

Consistently with the social doctrines of Sikhism which finds its main support among them, the Játs have no general system of social grades, each tribe being in theory equal to the rest.

THE TRIBES OF THE PUNJAB PROPER AND THE HIMALAYAN AREA.

103. The Baloch and Pathán races are virtually confined to the Indus Valley, which is not, geographically, a part of the Punjab. The rest of the Province is mainly occupied by the congeries of tribes called Rájpúts, Játs and Gujars, with certain minor tribes.

Jats.

104. Of these groups the Játs are the most important, comprising nearly 5,000,000 souls, or close on one-fifth of the whole population of the Province. The distribution of this group is also of peculiar interest. It is hardly found in the Himalayan area, but is an important element in the population in almost every other district, especially in the Central Punjab, forming three-tenths of the population in Rohtak, Ludhiána and the Phulkián States, while the Chenab Colony has an equally strong Ját element. The Játs are also numerous in the South-West Punjab, in which part the term has, however, two distinct meanings and includes, on the one hand, all agriculturists irrespective of tribe or caste, and on the other the mass of the Muhammadan tribes which are below the Sayad, the Baloch and the priestly or ruling tribes, while they are above the artizan and menial classes. Elsewhere the Játs comprise tribes of very various and obscure origins. Where, as on the borders of Rájpútána, the Játs come in contact with the Rájpúts they have a somewhat inferior status, but in the central districts in which Sikhism is dominant they own no superior and are fully equal in social estimation to the Rájpúts.

Rajputs.

105. The Rájpúts with a total population of over a million and three-quarters also comprise many tribes of different religions, races and social systems. By religion they are now mostly Muhammadan, only about one-fourth being Hindús, while a very few are Sikhs. By race they include the ancient ruling tribes of the Jumna Valley, the Chauhán and Tunwar 'which gave Delhi its most famous Hindu dynasties'; the Bhattís of the south and centre who have migrated from Bikáner and Jaisalmer into their present seats: the Syáls of Jhang: and the Punwárs of the south-west. In the northern or submontane districts the Rájpúts also represent the old ruling tribes such as the Chibhs of Gujrát, the Janjúas of the Salt Range, and others, while in the Kángra District they preserve a very old type of Hindu aristocracy, and comprise over a fifth of the total population.

Gujars.

106. The Gujars are an important agricultural and pastoral tribe. They are most numerous in the eastern half of the Province, and in the districts of the extreme north-west, especially in the district of Gujrát, to a tract in which they give their name. By origin they are, if language be a test, distinct from both the Rájpúts and Játs, as their dialect is akin to the Mewári of Central India. In organization, however, they closely resemble the Játs, the tribes being equal in status *inter se*, although in Gujrát itself social distinctions of a curious kind have been evolved.

Minor Dominant Tribes.

107. These are tribes which, like those already described, are, or have been, dominant in parts of the Punjab. In the Salt Range tract their tendency is to claim Arab or Moghal, and throughout the rest of the Punjab, Rájpút descent, while in the Western Plains and Deraját they are often classed as, and hardly to be distinguished from, Játs. They may be divided into three groups. In the Salt Range we have the Gakkhars of the northern cis-Indus portion of the tract, the Awáns of the Range itself, and the Khattars who lie between them. In the Western Plains we find the Khokhars of Jhang and Shahpur, one of the most widely spread of the Punjab tribes, now claiming in the west Arab descent, although recognized in the east as Rájpúts; the Kharrals and Khatiás of the Ravi, the latter being the lineal descendants of the Kathaei, who, in their stronghold of Sángla, so stoutly resisted the victorious

army of Alexander; and the Dáúdpútrás of Baháwalpur, to which State they gave at once a founder and a dynasty. In the Eastern Plains the group is represented by the Dogars of the Upper Sutlej and Beas; the Rors of Thánesar, whose home is on the great battlefield of the Mahábhárat; the Tagas of the Lower Jumna, probably the descendants of the Scythian Takas, with a snake for their totem, the tradition of whose defeat and slaughter is preserved in the story of King Janamajáyás holocaust of serpents; and the Meos and Khánzádahs of the Northern Arávalís, probably of aboriginal origin, and the latter standing with respect to the former in a relation similar to that as existing between Rájpúts and Játs.

The Pathan, Baloch and Dependent Tribes.

Baloches.

108. The Province of the Punjab, as now constituted, contains a comparatively small number of Patháns, but the Baloch element is still nearly as numerous as it was in 1891, the borders of the North-West Frontier Province having been devised to include the trans-Indus territories in which the Patháns form the dominant factor in the population and to leave the Baloch tribes under the Punjab Government. To effect this object the trans-Indus district of Dera Gházi Khan had to be remodelled. In that district the Baloches form the dominant race, although Baloch tribes are found in considerable strength cis-Indus, in the Baháwalpur State and in the districts of Muzaffargarh, Jhang and elsewhere. Cis-Indus, however, the status of the Baloch is always far lower than it is in Dera Gházi Khan, and in Karnál, to the east of the Province, the Baloches have sunk to a criminal tribe.

The Baloch tribal system only exists in full force in Dera Gházi Khan, in which district the chiefs or *tumandárs* still exercise considerable authority, controlled on the one hand by custom and on the other by the British administration. Under this system the Baloch has preserved his national characteristics of hospitality, courage and fidelity to his word. He remains a keen horseman, though comparatively few enlist in our Cavalry regiments, owing to their home-keeping tendencies and their inability to endure the continuous restraint of regimental discipline. As Muhammadans they are free from bigotry, and are but little under the influence of fanatical *mullahs* or priests, in this, as in many other respects, contrasting favourably with the Patháns. Murderous outrages under the influence of religious excitement are exceedingly rare among the Baloches.

The history of the Baloch tribes is still obscure. They advance a claim to Arab descent which may have some foundation in fact, but all that can be said with certainty is that 'about the middle of the 15th century the Baloches, who had some 500 years earlier occupied the western confines of the Lower Sulemáns, moved northwards and eastwards into the Punjab along the mountains and the Indus Valley, expelling Patháns from the former, and subjugating the Ját inhabitants of the latter. In 1555 a large body accompanied Humáyún in his victorious re-entry into India, and so obtained a footing in the Punjab proper.'

The Census figures in 1891 included 5,774 persons living in the Baloch trans-frontier, the hills beyond the Dera Gházi Khan frontier. They now include 22,369 souls enumerated in that area, and the total number of Baloches according to the Census of 1901 thus amounts to 467,843 in the new province of the Punjab and 491,789 in the old Province,—an increase of 18 per cent. since 1891.

Pathans.

109. The tribes which occupy the Upper Valley of the Indus after it leaves the great ranges of the Himalayas are generically called Patháns, as their language, which includes several dialects, is alled Pashto. The Patháns form the dominant element west of the Indus, both in the newly-constituted North-West Frontier Province and in the territories, extending into Afghánistán, which lie beyond it. Below the ruling Pathán tribes is a subject population

of Hindki, Tirahi and other clans, some of whom have been affiliated to and incorporated in the Pathán tribes, but who for the most part are dependants or *hamsáyás* of those tribes, in much the same way as the Ját population of Dera Gházi Khan within *tuman* limits lives under the protection of the Baloch tumandár.

In the Province of the Punjab as now constituted the Pathán element is, however, not very numerous or important, as it only comprises 263,897 souls, many of whom were temporary immigrants, employed in horse-dealing, labour and trade, during the cold weather of 1900-01. The only tracts in the Punjab in which the Patháns form the dominant agricultural tribes are the Chach country in the Attock Tahsíl of the Ráwalpindi District and the newly-constituted Miánwáli District, in which tracts they are hardly to be distinguished in character and customs from the Muhammadan peasantry of the adjacent districts. The Pathán tribal system only subsists in any force west of the Indus, and to the east of it the Pathán is well-nigh as tractable as the Baloch or the Rájpút.

Foreign Races.

Moghals, Sayads, &c.

110. The principal foreign races in the Punjab are the Moghals, Sayads and Qureshís. The Moghals number nearly 100,000 souls, and may be regarded as in the main descended from the Moghal armies which invaded India. They are somewhat widely distributed, but are most numerous in the Ráwalpindi and Jhelum Districts, which lie on the tract followed by the Moghal armies. The Sayads and Qureshís are groups of very diverse origins. In the south-west of the Province, and occasionally elsewhere, are to be found families with well-founded claims to be descended from the tribe of the Prophet Muhammad, but the claim to Sayad or Qureshi origin is very generally advanced by families which claim a saintly character or supernatural powers. As a result the number of Sayads is returned as no less than 238,000 souls, and that of the Qureshís as nearly 53,000, and even these figures exclude such tribes as the Bodlás, who claim Qureshi origin. The Arabic term Sheikh does not in this Province denote a caste, being merely a title given to or assumed by converts to Muhammadanism whose original Hindu caste was not very high Similarly the term Khoja, of Persian origin, is conferred upon converts of all classes, though it is usually confined to Khatrís, Arorás, Brahmans and Bhátiás who have accepted Islám. Khakha is somewhat similarly used, and including this group the Sheikhs and Khojás amount to nearly 425,000 souls.

Priestly and Religious Castes.

Brahmans.

111. Of these the most important is the Brahman, a caste of varying status with a singularly complex organization. Its distribution is also remarkable, for though necessarily represented in every district, as Hindús are found throughout the Province, it only amounts to a tenth of the population in the Himalayan area and in Rohtak, being fairly numerous in the south-east, and numerically weak in all the western districts. This is due to the fact that in the former parts of the Province the Brahman is often a land-holder and hardly exercises any spiritual or ceremonial functions, whereas in the Eastern Punjab he is almost invariably a dependent of the Hindu trading castes.

The Brahmans are divided into two great territorial groups,—(*i*) the Gaur who are only found in any numbers east of a line drawn through Simla and Patiála, *i.e.*, in the basin of the Jumna, and (*ii*) the Sarsut, the Brahmans of the Punjab proper and *par excellence* of the Khatri and Arora castes.

The social status of the Brahman depends primarily on the status of the caste, or section of a caste, to which he ministers. Thus the Brahman of the Khatri ranks higher than the Brahman of the Arora, while the Chamarwa or Chamárs' Brahman stands entirely outside the pale of Brahmanism just as the Chamár is beyond the pale of Hindúism. But further the status of a Brahman depends on occupation, for those who receive inauspicious offerings, or are

employed on occasions of death, form lower sub-castes, such as the Mahá-Brahman or Achárj, the Sáwni, the Ved-pátr, and the Dakaut. Another 'functional group' of the Brahmans is apparently the Bháts, who are, however, usually regarded as a separate caste and have as such been separately tabulated. They act as minstrels on ceremonial occasions, and number nearly 38,000 souls.

The Brahmans, as a body, appear to be retrogressing in wealth and influence, and as they find a difficulty in living on the alms they receive as spiritual guides are taking to domestic service and similar secular pursuits.

Religious Orders.

112. Besides the Sayads and Qureshís who form the main religious classes of the Muhammadans, and the Brahmans who occupy a somewhat similar place amongst the Hindús, there are a number of religious orders, usually celibate in theory, but by no means rigorously so in practice. These orders thus tend to form quâsi-religious castes, and it is utterly impossible to draw any line between those who are members of an order and those who are members of the caste which bears the same name as the order. These orders were returned to the number of 385,000 souls (of whom 164,000 were females) in the Census as Faqírs by caste, of whom the Muhammadan Madáris and the Hindu Bairágís were the most numerous. In addition to these the Jogís, as a caste, numbered over 75,000 souls.

Miscellaneous Castes.

The Minor Professional Castes.

113. The position of this group hardly admits of definition. It has been on former occasions divided into three classes:—

(*i*) the Nái, Bhát and Mirási, of which, however, the Bhát, as explained above, is apparently a Brahman sub-caste;

(*ii*) the Jogi and Ráwal, who are by origin at least a distinctively religious order, the Ráwal being the chief or teacher of the Jogís; and

(*iii*) the Bahrúpiás and Bhands who are hereditary actors and story-tellers.

But each of these castes exercises ceremonial functions which overlap those of the religious castes, for the Nái is a leech or surgeon as well as a barber, while in the latter capacity he acts as an ambassador or as a go-between on formal occasions, and moreover often receives the clothes of the dead, thus usurping the functions of certain Brahman sub-castes. The Mirási or genealogist also acts as a bard, a profession also followed by the Bháts and certain other minor castes.

The Mercantile Castes.

114. The Hindu trading castes fall into three main groups,—(*i*) the Khatrís, in the central and more especially the north-western districts of the Province, (*ii*) the Arorás, in the south-west, and (*iii*) the Baniás of the south-east. Other but less important groups are the Bhátiás, confined to the western districts, the Súds and Bhábrás, found only in the sub-Himalayan districts, and the Pahári Mahájans and Bohrás, of the Himalayan area. The principal Muhammadan trading 'castes' are the Paráchás, in the west of the Province, and the Khojás and Khakhás already noticed, but other Muhammadan castes, such as the Patháns, Sheikhs and Kashmírís, also engage largely in trade.

Of the Hindu trading castes the Khatrís stand highest in the social scale. They are a distinctively Punjab caste, and have a remarkably complex social system. Though they gave Sikhism its founder and most of its great religious leaders, they are mostly Hindús, only the sections to which the Sikh leaders belonged being, as a rule, Sikh by religion. The Arorás claim a Khatri origin, but the point is a doubtful one, as in many respects their customs are different, though their social organization closely resembles or imitates that of the Khatrís. The Baniás of the Punjab are mainly of the Agarwál sub-caste, a few Oswal being found on the Rájpútána border. Their organization is in

marked contrast to that of the Khatrís, and they form in reality a great occupational group divided into several sub-castes, based on sectarian differences, of which the Mahesri or Sivaites are an example. The Bhátiás are an immigrant caste of traders from Western Rájpútána, while the Bhábrás and Súds are probably indigenous to the Punjab, the former being Jains, mainly of the Swetambara sect, while the Bániás are often Jains of the Digambara sect.

The Khatrís, and indeed most of the trading castes, are not however, exclusively traders, but are found in most of the learned professions and in Government service, and they also engage in banking and money-lending. Of the Hindu castes the most progressive appear to be the Agarwál Baniás and the Arorás, the rigid social system of the Khatrís apparently militating against their advance as a body.

Peddlers and Carriers.

115. The only castes which deserve notice under this head are the Lobánás and Banjárás. Both are foreigners to the Punjab by origin. The former, originally salt-carriers, were the Commissariat Agents of the Moghal armies, from whose leaders they received grants of land. They are found mainly in the Kángra District and in the sub-Himalayan tracts to the west of it, but they have colonies elsewhere, especially in the Baháwalpur State. The Banjára is of much the same standing as the Lobána, and is settled in the western submontane districts.

Menial and Artizan Castes.

116. This group includes numerous castes of diverse origins and very different social standing. The Tarkhán, or carpenter, caste, which is indistinguishable from the Lohár, comprises skilled mechanics, many of whom are rising under British rule to the status of a professional class as trained engineers. The menial classes include the unclean castes, like the Chúhrás or sweepers, who stand outside the pale of Hindúism and who can only rise in the social scale by abandoning their hereditary calling and becoming Muhammadan converts, modern Sikhism offering little opportunity to the lowest castes to rise in social position. There is, however, but little doubt that the definite abandonment of a lower for a higher occupation leads, sooner or later, to promotion in the scale of castes, even amongst the Hindús, and this fact renders it impossible to form any conclusions as to the relative progress of the various castes, for a decrease in the numbers of any given group may simply mean that many of its members have adopted a new pursuit or handicraft and been received into a higher caste. Conversely, it not infrequently occurs that fragments of the dominant castes are driven by circumstances to take to a trade or handicraft, and are gradually absorbed into its caste. This process must have been exceedingly common in former times when sudden political changes were frequent, and thus the modern lower occupational castes comprise many diverse elements, a fact which explains the extraordinary complexity of the social groups which exist in all the castes, even the lowest.

It also follows, from what has been said above, that, though the rise of a whole caste is in the nature of things hardly possible, groups within a caste are constantly rising in social estimation. Instances of this are afforded, locally, by the Lobánás already mentioned, by the Machchhís or water-men, by the Meghs, and others. The following notes describe briefly the various castes which comprise this group.

Vagrant and Criminal Castes.

117. The vagrant population includes large elements, like the religious mendicants, which form no part of vagrant or gypsy tribes. Moreover, the latter are not always criminal, nor, on the other hand, are the criminal tribes always vagrant. Thus the vagrant tribes comprise the Ods, the *beldárs* or navvies, the Changars, who are also labourers, and a certain number of Lohárs, or blacksmiths: all of whom are non-criminal. Other vagrants are the Bauríahs on the middle Sutlej, the Aherís and Thorís of the eastern districts on the Rájpútána border, who are hunters, and the Jhabel, Kahal and Mor tribes of the lower Indus Valley, who are fishermen. These may also be regarded as in the main non-criminal, though the Bauríahs are of bad repute. Essentially criminal tribes are the Hárnís, Sánsís, of the centre and sub-montane, the Mínás of

Gurgaon, the Baloches and Tagús in Karnál, the Mahtams especially in Lahore, and the Pakhíwárás and Bháts in Siálkot, all of whom are under the operation of the Criminal Tribes Act. These tribes, though criminal, are however not always 'vagrant,' as many of them own land.

Scavenger Castes.

118. The Chúhrás, called throughout the west of the Punjab Musallís, Kutánás or Khojás when Muhammadans, are returned as of all religions. The Sikh Mazbi is by origin a Chúhra, who has, for some few generations at least, observed the ordinances of Sikhism, and abandoned the most degrading of the Chúhrás' functions, so that he should be regarded as a degree above the scavenger castes. The Chúhra is an indispensable element in the village community of the Eastern Punjab, but not so in the west, where the sweeper is often not to be found, and in consequence but few are returned in the districts on the Indus. In the Central Punjab this caste probably furnishes more agricultural labourers than sweepers, and they have been very largely employed in preparing the land on the Chenab Canal for cultivation. Those who have taken, permanently, to working in leather or weaving have doubtless for the most part been returned as Chamárs or Juláhás.

Leather-workers and Weavers.

119. The Hindu Chamár, Sikh Rámdásia, and Muhammadan Mochi are the great leather-working castes: and the Juláha, often called Páoli in the west, is the weaver of the Punjab. It is, however, impossible to entirely separate these castes from the Chúhra, for south of the Sutlej the term Chúhra-Chamár is applied to the two castes collectively, the idea apparently being that working in leather defiles, so that the Chamár too is not within the pale of Hindúism. Impurity is, however, a question of degree, and the Chamárs have several sub-castes, of which one, the Bauna, consists of weavers. Similarly Mochi-Juláha is used of the leather-working and weaving castes collectively.

Watermen, Boatmen and Cooks.

120. This class includes multifarious occupational groups which can hardly be separated from one another. The Hindu Jhíwar (or Dhinwar) or water-carrier is so called when he acts in that capacity, but as a bearer of burdens he is called a Kahár, and if a cook-shop keeper or grain-parcher, Bhatiára or Bharbhúnja. If a Muhammadan the water-carrier is called Máchhi.

LANGUAGE.

Bibliography.

121. The last decade has not been unfruitful in works which have done much to systematize our knowledge of the vernaculars of the Punjab. In 1895 some rough, but most instructive, notes on the Grammar of the language spoken in the Western Punjab, by the Reverend Trevor Bomford, were published in the Journal of the Asiatic Society of Bengal. In 1896 Mr. A. H. Diack, C. S., published his "Kúlu Dialect of Hindi." This was followed in 1898 by the Grammar and Dictionary of Western Punjábi by the Honourable Mr. J. Wilson, C. S., C.S.I. The value of both these works is much increased by the addition of folk-songs, proverbs, etc., in the languages with which they deal. In 1900 Dr. Jukes, M.R.C.S., of the Church Missionary Society, Dera Gházi Khan, published a valuable Dictionary of the Jatki or Western Punjábi language. The late Mr. O'Brien, C. S., left some notes on the Kángra Dialects in manuscript and a Gadi Grammar, with folk-songs, etc., in print, which have now been all published in the Kángra Gazetteer, revised edition. On the Sánsi dialect some excellent notes by the Reverend T. Grahame Bailey, B.D., M.A., Wazirabad, were published in the Journal of the Asiatic Society of Bengal, No. 1, of 1901, pages 7—14. These have been re-printed separately, with notes by the same author on the Secret Words of the Qasáís and Chúhrás, and the Argot of Punjábi Gamblers.

In Tibetan nothing seems to have been done in the Punjab, but the Asiatic Society of Bengal in 1901 published a Sketch of Ladákhi Grammar by the Reverend A. H. Francke of the Moravian Mission at Leh, and a collection of Ladákhi Proverbs by the same author in 1900. In Pashto much has been done. In 1901 Captain Roos-Keppel published a useful Manual of Pashto,

and in 1902 Mr. J. G. Lorimer, C. S., C.I.E., published his Grammar and Vocabulary of Wazíri Pashto, which contains more information than I could condense in this chapter.

The Linguistic Survey.

122. The final results of the Linguistic Survey were not available, in the Punjab, for use in the Census, but Dr. G. A. Grierson's classification was followed in tabulating the returns. The Census statistics are, however, as was inevitable, not always in accord with the estimates framed in the course of the survey, many sub-dialects recognised in the latter having been omitted altogether or returned in small numbers in the Census Schedules.

The Languages of the People, Punjab.

Language.	*Persons.*	*Proportion per mille.*
Total population	24,754,737	...
IRANIAN—Total	96,469	3·9
Balochi	40,520	...
Pashto	52,593	...
INDIAN—		
1. North-West Group—Total ...	2,791,750	112·8
Mooltáni	961,950	...
Bahawalpuri ...	530,635	...
Jatki ...	220,815	...
Ghebi ...	74,078	...
Hindki ...	224,078	...
Pothwári	225,661	...
Sawáin ...	42,291	...
Jandáli ...	39,016	...
Khatri ...	34,930	...
Deráwál	383,229	...
2. South-West Group—Total ...	1,004	...
3. Western Group—Total ...	20,116,128	812·6
Punjábi ...	15,250,157	...
Jangli ...	74,072	...
Dogri ...	21,827	...
Bagri ...	281,198	...
Márwári ...	190,137	...
Gujari ...	23,147	...
Mewáti ...	102,794	...
Hariáni ...	604,011	...
Hindustáni including Urdu ...	3,535,734	...
4. Northern Group—Total ...	1,562,178	63·1
Pahári ...	1,346,869	...
5. Eastern Group—Total ...	45,800	1·9
Púrbi ...	43,328	...
6. Gypsy Dialects—Total ...	10,416	·4
TIBETO-BURMAN HIMALAYAN GROUP—Total	60,913	2·5

Comments on foregoing table.

123. Following Dr. Grierson's classification the figures in the above table show the principal languages spoken in the Punjab. It is noticeable that the Province, as now constituted, still contains a Pashto-speaking population of over 52,000 souls, while Balochi is only spoken by some 40,000.

The North-Western Group of Indian languages includes Kashmiri on the north and Sindhi on the south, languages spoken in the Punjab by 9,000 and 28,000 persons respectively. This group is, however, mainly represented in this Province by the Lahnda or 'Western' Punjábi which has numerous dialects and is spoken by nearly 3,000,000 souls, or over 11 per cent. of the total population.

The most important dialects are the Mooltáni, Baháwalpuri, Derawál, Pothwári, Jatki and Hindki, the two latter being the dialects of the Ját populations which were subjugated by the dominant Baloch and Pathán tribes on the Indus. Dr. Grierson's view is that the Eastern Punjab, Gujrát and Rájpútána were originally Aryanized by an earlier immigration, but were subsequently covered by a dominant layer of later invaders, who further thrust the older invaders back upon the Jhelum and the Indus. The speakers of the Western Punjábi thus represent the earlier Aryan migration into India. The South-Western Group is hardly represented in this Province. The Western Group comprises the most important dialects of the Province, as it includes Punjábi with over 15,000,000 speakers, and Hindustáni or Urdu with three-and-a-half millions. The remaining dialects of this group are confined to the south-east of the Province, except Gujari, which Dr. Grierson classes provisionally with Rájastáni, and which is found in scattered blocks along the foot of the Himalayas.

In the Northern Group the various dialects, returned by a million-and-a-half souls, are spoken by the Himalayan population. Pahári, a vague term including innumerable local dialects or rather *patois*, is returned by most of these.

In the same way Púrbi is a general term for the numerous dialects of the Eastern Group spoken by immigrants from the United Provinces and Bengal. The gypsy dialects, as to which little is really known, are returned only by 10,000 souls, though the numbers of the vagrant tribes are far larger.

The Tibets-Burman dialects are the speech of the north-eastern corner of the Province and represent the overflow of the population of the Tibetan plateau into the inner Himalayas.

Changes in the Administration.

Constitution of North-West Frontier Province.

124. By the following Proclamation in the *Gazette of India* the north-western districts of the Punjab were excluded from the Province and constituted, together with the trans-frontier territories, a separate Administration:—

No. 5780, *dated Simla, the* 25*th October* 1901.

WHEREAS the following territories, that it is to say, the districts of Peshâwar, Kohât and Hazára (as altered by the Notification of the Punjab Government No. 994, dated the 17th October 1901), the Bannu and Marwat Tahsíls of the District of Bannu, and the Tánk, Dera Ismail Khan and Kulâchi Tahsíls of the district of Dera Ismail Khan (as altered by the Notifications of the Punjab Government Nos. 992 and 993, dated the 17th October 1901) are part of the dominions of His Majesty the King-Emperor of India;

AND WHEREAS it is expedient that the said territories, which are now under the administration of the Lieutenant-Governor of the Punjab, should be formed into a separate Province and constituted a Chief Commissionership under the administration of a Chief Commissioner;

KNOW ALL MEN, AND IT IS HEREBY PROCLAIMED, that His Excellency the Viceroy and Governor-General of India in Council, in exercise of the powers conferred by Section 3 of the Government of India Act, 1854 (17 & 18 Vict., C. 77), and with the sanction and approbation of the Secretary of State for India, is pleased hereby to take the said territories under his immediate authority and management on and with effect from the ninth day of November 1901, and further to direct that, on and with effect from the said ninth day of November 1901, the said territories shall be formed into a separate Province and constituted a Chief Commissionership, to be called the Chief Commissionership of the North-West Frontier Province and to be administered by a Chief Commissioner.

Area, Population and Land Revenue of Districts transferred.

125. The area and population of these districts and portions of districts so transferred is as follows:—

District.	Area, square miles.	Population.	Land Revenue
			Rs.
Hazára (as altered by Punjab Government Notification No. 994, dated 17th October 1901, which retranferred Tahsíl Attock to Ráwalpindi)	2,843	560,288	3,16,000
Peshâwar	2,605	788,707	10,95,000
Kohât	2,609	217,865	1,19,1000
Bannu (Tahsíls Bannu and Marwat)	1,680	231,485	2,59,000
Dera Ismail Khan (Tahsíls Tánk, Kulâchi* and Dera Ismail Khan*)	3,340	252,379	2,95,400
Total area excluded from Panjab ...	13,077	2,050,724	21,56,400

* From Tahsíl Kulâchi 31 villages and from Tahsíl Dera Ismail Khan two villages were transferred to Dera Ghâzi Khan and to Tahsíl Leiah (Miánwali) by Punjab Government Notifications Nos. 992 and 993, dated 17th October 1901.

Area Population and Land, Revenue of Punjab.

126. The area, population, and land revenue of the districts now remaining in the Punjab are:—

Area, square miles.	*Population.*	*Land revenue (collections, 1901-02).* Rs.
97,272	20,306,252	2,55,13,009

Re-arrangement of Divisions and Districts.

127. Of the old Derajât Commissionership the districts of Dera Ghâzi Khan and Muzaffargarh, nearly two-thirds of the Dera Ismail Khan District and nearly three-fifths of the Bannu District remain in the Punjab. These, together

with the districts of Mooltan and Jhang, previously in the Lahore Division, were constituted a new Commissionership and now comprise the Mooltan Division. The portions of the Dera Ismail Khan and Bannu Districts thus remaining in the Punjab were, with the exception of 412 square miles added to Dera Gházi Khan, formed into the new Miánwáli District. The districts of Siálkot and Gujránwála were transferred from the Ráwalpindi to the Lahore Division, which thus includes six districts as heretofore. The Ráwalpindi Division is reduced to four districts, to one of which, Ráwalpindi, the Attock Tahsíl of the Hazára District was transferred prior to the exclusion of Hazára from the Punjab. The Divisions and districts as now existing are shown in the table on page 44.

Tributary States.

Political Supervision.

128. Excluding Baháwalpur, for which there is no special Political Officer, and Chamba, which is in the political charge of the Commissioner of Lahore, the Native States in the Punjab are arranged for the purposes of supervision into four groups as follows:—I, the Phulkián States, comprising the States of Patiála, Jínd and Nábha, for which a separate Political Agent was appointed on the 16th January 1901; II, the States of Kapurthala, Mandi, Máler Kotla, Farídkot and Suket in the political charge of the Commissioner of Jullundur; III, the States of Sirmúr, Kalsia, Pataudi, Loháru and Dujána in the political charge of the Commissioner of Delhi; and IV, the States of Biláspur, Bashahr, Nálagarh, Keonthal and the numerous other small States in the Simla Hills which are in the charge of the Superintendent of Hill States, Simla.

I.—Phulkian States.

PATIALA.

Area, 5,412 square miles; population (1901), 1,596,692; gross revenue Rs. 57,11,549; estimated Military Forces, including Police, 7,814; race of Chief, Sidhu Ját.

General.

129. The Chief, Mahárája Bhupendar Singh, is now 11 years of age, and the affairs of the State were administered throughout the year by the Council of Regency. At the beginning of the year under report Munshi Sohel Singh succeeded Miss Swift as Tutor to the Mahárája, and a short time afterwards Bhái Basant Singh was appointed as spiritual adviser. The Mahárája was formally installed by Sir Mackworth Young on the 22nd October 1901. In the beginning of March His Highness visited Lahore for a week to bid farewell to Sir Mackworth Young and to welcome Sir Charles Rivaz. The Bareilly widow of the late Mahárája Rajindar Singh, Walli Ráni, died at Bareilly in May 1901.

Administrative.

130. There has been no change in the constitution of the Council of Regency during the year. His Excellency the Viceroy conferred the title of Sardár Bahádur upon the President, and the sanad was presented to Sardár Gurmukh Singh in open darbár by the Political Agent. The Council have a very onerous task before them, and this year they have had exceptional difficulties in connection with plague and the investigation of the financial relations of the State with the Dholpur State and commercial firms such as Messrs. W. J. Tellery & Co. They have had, and will have for some time, to deal with a large number of administrative and personal problems which are the inevitable result of the changes and reforms introduced by themselves or initiated by the lent officers and the higher officials in the State.

Finance.

131. The services of Mr. T. H. S. Biddulph, who was deputed in January 1901 as Accountant-General for one year, have been retained for a further period of two years. The Council rightly felt that much of the valuable work done by that officer would be thrown away if his control over the finances were to cease so soon, and that his advice and co-operation in the important money disputes, not yet settled, were indispensable. The financial condition of the State is not prosperous at present, but there is no cause for anxiety.

Dakaiti.

132. The special dakaiti operations conducted by Mr. L. L. Tomkins, District Superintendent of Police, terminated on 1st May 1901 and resulted in

the conviction of 177 persons. The value of the work done has been proved by the marked abatement in crime during the past year. The Police Department is being reorganized, but Mr. Warburton is still hampered by want of funds.

Postal Department.

133. During the year the Postmaster-General of the Punjab found much to complain of in the working of the Postal Department, and proposed that Patiála should merge its postal system with that of the Empire. A Punjab official was deputed to inquire into the details of the working of this branch and submitted a most useful report. His suggestions have been generally acted upon, and the result has been of no little benefit to the State and the public.

Public Works Department.

134. Mr. Farrant, Resident Engineer, left Patiála on promotion in September, and Mr. S. Brandreth was appointed in his place. As the Irrigation Department was undermanned, two temporary Assistant Engineers were engaged, and the Punjab Government has recently offered the services of a permanent officer. The Roads and Buildings Branch of the Public Works Department is in a most unsatisfactory condition, but the Council have decided to postpone any attempt to reorganise it until they can procure the services of Rái Ganga Rám.

Army.

135. The Army has made great progress in efficiency. Large reductions have taken place among the local troops, and efforts are being made to confine the remainder to their legitimate work. The Imperial Service Troops have been twice inspected by the Inspector-General, who has given them high praise. The 2nd Regiment of Patiála Infantry was deputed in 1901 for garrison duty in Meean Meer. One-half of them returned early in February and the remaining half two months later. The old inefficient Body Guard have been disbanded and a new corps of picked men is being raised in its place.

Transport Resources.

136. In February 1901 Major Birch, R. A., visited the State with the object of ascertaining to what extent each of the Phulkián States could supply voluntary hired transport in the case of war. He found that it would not be safe to rely on procuring any ponies or mules, but that Patiála could easily supply one complete corps of 972 camels with attendants, while Jínd and Nábha could each furnish a sub-division of 243 camels. His proposals that these should be registered and periodically inspected are under consideration.

Railways.

137. During the year the Council have been dissatisfied with the working of the Rájpura-Bhatinda Railway, and have addressed the Manager of the North-Western Railway with a view of securing better rolling stock. They have suggested also that the rates of freight and the fares might be re-adjusted, as the earnings are by no means what they ought to be.

Settlement.

138. Settlement operations are in progress in 8 out of 16 tahsíls. The Bhatinda and Narwána Tahsíls have been under settlement for some years, and fairly good maps were made, but the record work was practically worthless and its revision has been very laborious. Up to date 66,000 squares have been laid and nearly four million bighás have been mapped. The Patwári establishment has been reorganised. As far as possible only residents of the State are employed in the Settlement Department, and several of the superior officials have been or are being trained in the Punjab. The expenditure incurred on Settlement operations last year was Rs. 1,37,194.

Plague.

139. No mention was made in the last year's report of the plague epidemic. The disease was then prevalent in the town of Bassi on the north-west of the State and in a few surrounding villages. The last case occurred on 6th June 1901, and in the following month the whole State was apparently quite clear. The epidemic broke out again, however, in September, and from that time spread rapidly over the greater part of the State. In spite of special arrangements for inspection and quarantine two cases occurred in Patiála itself on the 9th December. After a brief check the disease found as congenial a soil for its development in the city as it had in Bassi, and has claimed an abnormal number of victims. A public meeting was held and a general committee was appointed for carrying out preventive and remedial measures. For various causes they were able to effect little. They were not in touch with the people, whose dislike of the procedure adopted, combined with their

feelings of alarm, resulted in a riot on the 19th February, when the Medical Adviser of the State was attacked and wounded by the mob and narrowly escaped being burnt to death. The riot checked operations for a time in the city, and the cases rapidly multiplied in spite of a considerable exodus of the townsfolk to neighbouring villages. After about a fortnight's interval operations were again resumed and the staff was increased. About the middle of April the disease began to decline. It has been impossible to obtain full statistics of the ravages of the disease, but the State with the exception of the Narnaul Nizámat on the Jaipur border and the city have been as severely stricken as any part of the Punjab. Plague is steadily on the decline and may possibly disappear altogether before the end of the hot weather, but it is almost certain to recrudesce towards the close of the monsoon period. The one bright feature of the campaign has been the belief of the people in the protection afforded by inoculation, and there are everywhere signs that they are beginning to understand the value of prompt evacuation. Disinfection is as unpopular as ever.

JIND.

Area, 1,259 square miles; population (1901), 282,003; gross revenue, Rs. 14,90,461; Military Forces, including Police, 2,054; race of Chief, Sidhu Ját.

General.

140. The Chief, Rája-i-Rájgán Ranbír Singh, is now 23 years of age, but has no heir. He administers the affairs of his State. In March 1901 His Highness visited Lahore in connection with the departure of Sir Mackworth Young and the arrival of Sir Charles Rivaz.

Railways.

141. When the Government of India sanctioned a loan of 8¾ lakhs to the Jínd Darbár at 4 per cent. interest for the construction of the Ludhiána-Dhúri-Jakhal Railway it was agreed that this sum should be repaid in annual instalments of Rs. 1,30,000. The Darbár wished to pay off an even larger sum this year, but had to give up this intention owing to an additional demand being made on account of construction charges. A fortnight after the line had been opened for traffic the Engineer-in-Chief stated that the cost would not exceed 40 lakhs. Four months later the Jínd and Máler Kotla Darbárs were informed that an additional sum of Rs. 2,20,000 would be required from them. The Jínd Darbár had therefore, pending the result of their protest, to withdraw their offer to repay more than Rs. 1,30,000 as this year's instalment of the debt to the Government of India. On the 26th of February the Darbár complained of the small percentage of earnings on this railway, and on the 18th March the Manager, North-Western Railway, informed the Foreign Minister that it had been discovered that these earnings had been really under-estimated, and that probably a re-adjustment would show an increase of Rs. 25 per mile per week.

Taccavi.

142. Taccávi advances for the purchase of plough and milk cattle, seed and for wells amounting to Rs. 1,20,000 were issued during January and February, and the Darbár have set apart a further sum of Rs. 1,00,000 to be distributed in the same way when the monsoon breaks. This measure has had the happiest results.

Plague.

143. The State has suffered less severely from plague than either Patiála or Nábha, but the epidemic has cropped up in different centres in the Jínd and Sangrúr Nizámats. It has at last appeared in the capital, but so far the townspeople give prompt notice of plague cases and readily submit to inoculation. They show no disinclination to evacuate their houses and have them disinfected.

Financial Condition and Crime.

144. The State is in a sound financial condition, and is wisely and carefully administered. Crime is below the normal, and the Rája of his own motion has dispensed with the services of a Member of his Council who was proved in the recent dacoit campaign to be a harbourer of dacoits.

NABHA.

Area, 928 square miles; population (1901), 297,949; gross revenue, Rs. 12,21,313; Military Forces, including Police, 1,444; race of Chief, Sidhu Ját.

General.

145. Rája Sir Hira Singh has conducted the affairs of his State with his usual ability and close regard for the interests and comfort for his

subjects. He keeps all the details of the administration in his own hands. During the cold weather he suffered as usual from asthma and other bronchial troubles. With the exception of a visit to Simla in autumn he has not left his capital for over a year. He was extremely gratified by the receipt of an invitation to attend the Coronation of His Majesty the King-Emperor in England and made every preparation for the event. He arranged to leave India about the middle of April, but, at the request of Government, allowed himself a month before he was to start to be thoroughly examined by two of the leading European Medical Officers in the Punjab. When they gave it as their decided opinion that the risks of the journey and change of climate would be too great, he loyally acquiesced and begged to be excused on the ground of health. His Highness was keenly disappointed, but he has never once grumbled at the decision. His Highness the Tikka Sáhib was married on the 11th June 1901 to the daughter of Sardár Gurdiál Singh, Mán, formerly a Sessions Judge in the Punjab and now a fugitive. Owing to the period of mourning for the late Queen-Empress not having expired, only the necessary rites were performed. There were no festivities of any kind.

Relations with other States.

146. Towards the end of September 1901 a serious fracas occurred between some jungle guards of Nábha in the Bahwal' iláqa and some Alwar zamíndárs. One man was killed. His Highness consented to the case being tried by a special Magistrate appointed by Government.

Plague.

147. Plague crossed the Nábha border from Bassi in Patiála towards the end of December, but had not reached the city by the close of the year under report. The epidemic spread over a large portion of the Amloh and Phúl Tahsíls. By the beginning of April nearly 8,000 people had fallen victims to the epidemic.

Financial Condition.

148. In spite of a succession of bad years the financial condition of the State is sound.

II.—States in the political charge of Commissioner of Jullundur.

KAPURTHALA.

Area, 652 square miles; population (1901), 314,351; gross revenue, Rs. 13,00,000*; Military Forces, including Police, 1,525; race of Chief, Ahluwália; tribute, Rs. 1,31,000.

General and Administrative.

149. The Chief, Rája-i-Rájgán Sir Jagatjít Singh, K.C.S.I., is 29 years of age and has four sons. A noteworthy and most regrettable incident which occurred during the year was the loss to the State of its old and able Prime Minister Sardár Bhagat Singh, C.I.E., at the age of 56. Since his death the Rája has conducted the affairs of his State by means of a Council appointed by His Highness for this purpose and composed of the following officials:—

Díwán Azíz Bakhsh,
„ Bhagwán Dás,
Lála Hari Chand,

and the administration has continued to be efficient and successful in all its branches. Sardár Guláb Singh, son of Sardár Bhagat Singh, was appointed Chief Secretary of the State during the year under report, and Mr. J. O. S. Elsmore, formerly State Engineer, now holds the appointment of Private Secretary to the Rája. His Highness has obtained the loan of the services of Mr. H. J. A. Bowden, Executive Engineer, Punjab Public Works Department, as State Engineer, and has employed Mr. R. L. Rodden, a graduate of Oxford University, as Tutor to his sons.

Plague.

150. Plague prevailed in the Phagwára Tahsíl of the State during the greater part of the year. The capital itself has escaped so far.

MANDI.

Area, 1,200 square miles; population (1901), 174,045; gross revenue, Rs. 4,70,531; Military Forces and Police, 692; race of Chief, Rájpút; tribute, Rs. 1,00,000.

General.

151. The Chief of Mandi, Rája Bije Sen, is 56 years of age, and his state of health has continued to give cause for anxiety during the year. His heir,

* Does not include the income derived by the Raja from his Oudh estates.

Kanwar Bhawáni Singh, is being educated at the Aitchison College and is progressing satisfactorily. The Rája was to have undergone an operation for cataract in October, but owing to the state of his health it had to be postponed. The State was visited by Sir Mackworth Young in November.

Administrative.

152. The administration of the State is conducted by Pádha Jíwa Nand and has continued to be satisfactory. An expenditure of Rs. 59,000 was incurred during the year on public works: all the roads were repaired and the buildings put into good order.

Income and Expenditure.

153. The expenditure during the year was about equal to the income, being Rs. 4,69,105. The receipts on account of land revenue were Rs. 10,000 below those of the previous year, but the income from salt mines was higher by Rs. 24,000, and that from forests by Rs. 14,300, than in the previous year.

MALER KOTLA.

Area, 167 square miles; population (1901), 77,506; gross revenue, Rs. 2,67,459; Military Forces and Police, 396; race of Chief, Pathán.

General.

154. The Nawáb of Máler Kotla, Muhammad Ibráhím Ali Khán, is insane, and the administration of the State has been conducted for many years past by a Superintendent. Sir Amír-ud-dín Khán, K.C.I.E., Nawáb of Loháru, continued to hold this post during the year under report and conducted the affairs of the State with success, but some limited powers are exercised by the Sáhibzáda, Ahmad Ali Khán, who is now 21 years of age, under the general control of the Superintendent, and it is intended in the near future to entrust the entire management to him. The Nawáb of Loháru will however remain on for a time to give him advice.

Military.

155. The Máler Kotla Sappers returned from China in August 1901. Their conduct throughout with the China Expeditionary Force was commendable, and it was recorded by the Government of India that the corps had conducted themselves with much credit in the expedition and had contributed to the good reputation earned by the troops sent from India. They were presented by the Lieutenant-General Commanding the Expeditionary Force with a captured gun as a trophy, which was brought to Máler Kotla. Their Commandant, Mashír-ud-daulah Ausaf Ali Khán, received the honour of being made a Companion of the Order of the Indian Empire.

FARIDKOT.

Area, 642 square miles; population (1901), 124,912; gross revenue, Rs. 4,23,000; Military Forces and Police, 574; race of Chief, Sidhu Ját.

General.

156. Rája Balbír Singh, the Chief of Farídkot, is 32 years of age. He has no sons, and during the year under report he adopted as his heir his nephew Brij Indar Singh, the son of the late Kanwar Gajindar Singh, who is 5 years of age. The succession of this adopted son is conditional on the Rája having no legitimate sons of his own. The numerous complaints formerly made by tradespeople of long outstanding claims against the Rája remaining unsettled have at length been brought to an end. A claim of several years' standing brought on behalf of the Patiála State was also settled during the year, and large sums due to the estate of the late Kanwar Gajindar Singh have all been paid. A large sum of money due to the estate of the late Bibi Balbír Kaur, sister of the Rája, has also been paid to her husband Kanwar Baldeo Singh of Mursan. The administration of the State has improved considerably during the last two years, and credit for this is due to the Wazír, Rái Baroda Kanth Lahiri.

SUKET.

Area, 420 square miles; population (1901), 54,676, ; gross revenue, Rs. 1,35,667; race of Chief, Rájpút ; age of Chief, 36 ; tribute, Rs. 11,000.

Education of Chief's son.

157. There is little to record regarding the administration of this State during the year. The education of the Tika, who is now 16 years of age, has received some attention, but the arrangements so far made for this purpose by the Rája have not been very satisfactory, and Sir Mackworth Young when he saw the Rája in Mandi in November 1901 impressed upon him the importance of sending the Tika to the Aitchison College.

III.—States in the political charge of the Commissioner of Delhi.

SIRMUR.

Area, 1,108 square miles; population (1901), 135,687; gross revenue, Rs. 5,12,000; Military Forces and Police, 575; race of Chief, Rájpút.

General.

158. Rája Sir Surindar Bikram Parkásh, K.C.S.I., is 34 years of age and has now been nearly four years on the gaddi. His son and heir is about 13 or 14 years of age. The administration of this State continues to be in every way highly satisfactory. The administration is modelled on our own, being divided into departments, each under a responsible head, who is in most cases one of our *ex*-officials. The Rája himself exercises a constant and strict personal supervision over each department, devoting practically the whole of his time to State affairs. There are several useful institutions at Náhan, and the iron-works, which are under the supervision of an English Engineer, continue to be a success financially, the speciality being the manufacture of sugarcane presses which are sold or let out for hire over a large area in the plains of the Punjab. The Sirmúr Sappers under the command of the Rája's brother, Major Bir Bikram Singh, C.I.E., were employed throughout the year on the construction of the Kohát-Khushálgarh Railway line. In November 1901 His Highness the Rája was made a K. C. S. I. There is a good deal of friction at certain points between the people of Sirmúr and of the adjoining State of Jubbal, the outcome of a long-standing boundary dispute.

KALSIA.

Area, 168 square miles; popultaion (1901), 67,181; gross revenue, Rs. 1,95 888; race of Chief, Ját.

General.

159. The Chief of Kalsia, Sardár Ranjít Singh, is now 19 years of age, and the affairs of the State continued throughout the year to be directed by a Council of two members; but an endeavour has been made to gradually associate the Sardár in the work of administration, and in particular a certain number of civil and criminal cases were made over to him for trial. The management of the Council continues to be in every way satisfactory.

Plague.

160. There was during the latter part of the year a very severe visitation of plague, originating at Bassi and spreading over a large area. Thirty-three villages were infected, and as in the adjoining parts of the Ambala District the mortality was very heavy. The Council showed themselves equal to the occasion and all possible measures for checking the spread of the disease were adopted. It was arranged that the operations should be placed under the direction of the Deputy Commissioner and the Civil Surgeon of Ambala.

PATAUDI.

Area, 53 square miles; population (1901), 21,933; gross revenue, Rs. 60,359; race of Chief, Afghán.

Administrative.

161. As explained in last year's report, although the Nawáb, Muzaffar Ali Khán, is 34 years of age, the Pataudi State has been placed under Government management until the finances have been placed upon a proper footing and the nazrána due to Government on account of the succession has been paid off. The Názim, Khán Bahádur Kásim Ali Khán, discharged his duties as Manager very creditably throughout the year. M. Ibráhim Ali Khán, the Nawáb's son, is still at the Aitchison College. He is now 16 years of age.

Famine.

162. Like the Gurgaon villages, by which it is surrounded, this State escaped actual distress, though preparations were made in anticipation of a recurrence of famine. The only measures actually found necessary were suspensions of land revenue and distribution on a limited scale of gratuitous relief. The loan of Rs. 24,000 made by Government to meet famine expenditure in 1899-1900 has been repaid in full. The payment of the succession *naerána* should commence this year; but as the resources of the State have been seriously crippled by the succession of bad seasons, a postponement may have to be made.

LOHARU.

Area, 300 square miles; population (1901), 15,229; gross revenue, Rs. 66,000; race of Chief, Mughal.

General.

163. The Nawáb of Loháru, Sir Amír-ud-dín Ahmad Khán, K.C.I.E., continued to hold the appointment of Superintendent of the Máler Kotla State during the year, and the administration of Loháru was conducted by his brother.

Famine.

164. Owing to the total failure of the autumn and winter rains of 1901-02, there has again been practically a state of famine in Loháru. The situation, as in Hissar, has been just saved from being very serious by the favourable condition of prices of food-grains; but gratuitous relief and works on a small scale had to be started. The State is a very poor one, and from its situation is much exposed to calamities of season. In the famine of 1899-1900 a loan was made to the Nawáb by Government of Rs. 40,000 to meet famine relief expenditure. Of this Rs. 8,500 were repaid; but, in consequence of the return to unfavourable conditions, a further loan of Rs. 15,000 had to be granted.

DUJANA.

Area, 100 square miles; population (1901), 24,174; gross revenue, Rs. 77,170; race of Chief, Afghán.

General.

165. The Nawáb, Muhammad Mumtáz Ali Khán, is 36 years of age, but has no direct male heirs. There is little to record in connection with this State during the year under report.

Famine.

166. Severe distress was anticipated here, as in the adjoining villages of Rohtak, owing to the general failure of the kharíf and rabi crops; but, as prices have remained stationary, no actual relief measures have been necessary. A certain amount of revenue has been suspended, and the people have been assisted in other ways; but no general measures have been required. This State suffered severely in the famine of 1899-1900, and a loan was made to the Nawáb of Rs. 20,000 to meet the cost of relief measures. Of this Rs. 5,000 have been repaid.

IV.—Simla Hill States.

BILASPUR.

Area, 448 square miles; population (1901), 90,873; gross revenue, Rs. 1,57,000; race of Chief, Chandeli Rájpút; tribute, Rs. 8,000.

Administrative Difficulties.

167. The Rája of Biláspur, Bije Chand, is 28 years of age, and has no direct male heirs. Affairs in the State during the year were unsatisfactory. It has been reported that the State is much in debt and that large arrears of pay are due to the officials. At the commencement of the year the Rája brought several charges against Mián Surjan Singh, the President of his Council, and one of these, a charge of bribery, was heard by the Superintendent of Hill States and dismissed. The Rája appointed Mián Partáb Singh in his place, but he only stayed two months and after his departure the Council practically ceased to exist. In May 1901 a serious riot on the part of the Chandla Rájpúts of the State occurred, and subsequent to this most of the jágírs in the State were confiscated by the Rája and several of the Miáns put into jail. In order to ensure better government in the State, the Rája was called upon by Government to accept certain conditions, and these he has agreed to since the close of the year.

BASHAHR.

Area, 3,820 square miles; population (1901), 84,636; gross revenue, Rs. 85,000; race of Chief, Rájpút; tribute, Rs. 3,945.

General.

168. The Chief, Rája Shamsher Singh, is 63 years of age, and has no male heirs. During the year the management of the State remained in the hands of Lála Mangat Rái, who has given satisfaction. The betrothal of the daughter of the late Tika has not yet been arranged, but negotiations are in progress which it is hoped may result in a satisfactory conclusion. The bridge over the Sutlej at Rámpur has been completed and opened for traffic.

NALAGARH.

Area, 256 square miles; population (1901), 52,551; gross revenue, Rs. 130,000; race of Chief, Rájpút; tribute, Rs. 5,000.

Administrative.

169. The health of the Rája, Ishri Singh, who is 69 years of age, has been very precarious: he has had repeated attacks of fever, and at one time it was doubtful whether he would survive. The administration of the State throughout the year was almost entirely in the hands of the Council, whose work on the whole has been fairly successful. Complaints were occasionally received from men who were dissatisfied with the settlement, but were unimportant. Some trouble was also experienced with the Jágírdárs who are still trying to evade the orders passed on the settlement.

KEONTHAL.

Area, 116 square miles; population (1901), 42,192; gross revenue, Rs. 66,000; race of Chief, Rájpút.

Transfer of Management.

170. Government has approved of the revenue settlement completed under the direction of Mián Durga Singh; the forests have been demarcated and a record-of-rights is under preparation. Rája Bije Sen, who is now 25 years of age, was recognized as Chief on the death of his father and was formally installed on the 7th June 1901. The administration of the State was maintained in the hands of the Manager, but sanction has lately been given to its being made over to the Rája under certain conditions. The debt of the State has been largely increased during the year owing to funeral and installation expenses, and some years of careful management will be necessary before it can be freed from debt. The Rája has no direct male heirs.

BAGHAL.

Area, 124 square miles; population (1901), 25,720; gross revenue, Rs. 50,000; race of Chief, Rájpút; age of Rája, 59 years; has a male heir; tribute, Rs. 3,600.

Brahmans of Barog.

171. The general administration of this State is satisfactory. As reported last year, the Brahmans of Barog were released on binding themselves to pay revenue and arrears and to recognise the authority of the State. Arrears have not been paid in full according to their terms of the agreement and revenue has not been paid for three harvests; the State is willing to treat these Brahmans with leniency, but steps are now being taken to enforce the terms of the agreement against them.

BAGHAT.

Area, 36 square miles; population (1901), 9,490; gross revenue, Rs. 30,000; race of Chief, Rájpút; age of Chief, 41; tribute, Rs. 603.

Simla-Kalka Railway.

172. A son and heir was born to the Rája during the year. The acquisition of land for the Kálka-Simla Railway has given a good deal of trouble and led to some friction between the State and the Railway authorities. The Rája offered every facility for the work being commenced and allowed lands to be occupied without the submission of formal plans; but although the permament line has been laid in parts, detailed plans have not yet been submitted, and the State does not yet know what land is actually to be permanently retained.

JUBBAL.

Area, 288 square miles; population (1901), 22,242; gross revenue, Rs. 1,52,000; race of Chief, Rájpút; tribute, Rs. 2,520.

General.

173. The administration of this State was conducted throughout the year by the Wazír, Bhagwán Dás, as the Chief is a minor. The Rána, who is now 15 years of age, and his brother were sent to the Aitchison College for the winter term and have been doing very well. One of the objects was to remove them from the faction element in the State which has not decreased. Kanwar Gambír Chand, after considerable pressure, has left the Darbár: he has not, however, taken up his residence on his jágír, but has left the State. The Dehlti Ráni has taken up his quarrel with the Wazír and has employed an Advocate at Lahore to bring a series of charges against the Wazír about general mismanagement and peculation; the matter is under inquiry. Though the debt of the State is large, a considerable income is being derived from the forests, which is mainly utilized in reducing the debt.

REMAINING HILL STATES.

Kumharsain, Kaneti, Dhami, &c.

174. The affairs of the remaining small States call for no detailed notice. Kumhársain, whose Chief is insane, and Kaneti, whose Chief is a child, have been administered throughout the year by managers appointed by Government. A remission of half the amount of his annual tribute has been sanctioned in favour of the Rána of Dhámi on account of his general good administration. The settlement of Theog has been brought to a conclusion with the help of Lála Dhanwant Rái, the Manager of Kumhársain, but the cases of Jágírdárs are not yet settled, and the new revenue has yet to be collected. The Thákur of Dhádi died during the year and was succeeded by his minor grandson. The Rána of Kuthár, who is a minor, was sent to the Aitchison College for the winter term. An outbreak of rinderpest occurred in the States adjoining the Kálka-Simla Road and there was considerable mortality of animals. The crops of rabi 1901 were on the whole good; kharíf 1901 was poor in the States bordering the plains, but better in those of higher elevation; rabi 1902 was much below the average in area, and the straw was very short, but the outturn of grain in that harvest was satisfactory in consequence of the rain at the end of the year. Other necessary information in regard to these States is given in the statement below:—

No.	State.	Area in square miles	Population (1901).	Revenue.	Tribute.	Name of Chief.	Caste or Race.	Age.	Whether male heirs or not.
				Rs.	Rs.			Years	
1	Kumhársain...	90	11,735	25,000	2,000	Rána Híra Singh	Rájpút (Hindu).	60	Yes.
2	Bhajji ...	96	13,309	23 000	1,440	Rána Durga Singh	Do.	59	Yes.
3	Mailog ...	43	8,968	20,000	1,440	Rána Raghnáth Chand.	Do.	40	Yes.
4	Balsan ...	51	6,704	9,000	1,080	Rána Bír Singh ...	Do.	38	No.
5	Dhámi ...	26	4,505	15,000	720	Rána Híra Sirgh	Do.	25	No.
6	Kuthár ...	20	4,195	11,000	1,000	Rána Jagjít Singh	Do.	16	No.
7	Kunhiár ...	80	2,168	4,000	180	Thákur Tej Singh	Do.	67	Yes.
8	Mángal ...	12	1,227	900	72	Rána Tilok Singh	Do.	51	Yes.
9	Bíja ...	4	1,131	500	180	Thákur Ude Chand	Do.	75	Yes.
10	Darkuti ...	8	518	800	...	Rána Rám Saran Singh.	Do.	59	Yes.
11	Taroch ...	67	4,411	40,000	288	Thákur Kidár Singh.	Do.	37	Yes.
12	Sángri ...	16	2,774	2,400	...	Rái Híra Singh	Do.	51	No.

V.—Other States.

BAHAWALPUR.

Area, 15,000 square miles; population (1901), 720,876; gross revenue, Rs. 24,00,000; race of Chief, Dáúdputra.

The young Nawab.

175. The administration of this State has been successfully conducted throughout the year by Colonel L. J. H. Grey, C.S.I., the Superintendent. The young Nawáb, who is now 19 years of age, continues to show promise and passed the Entrance Examination of the Punjab University in May 1901, after which he left the Aitchison College. His work there showed considerable natural ability and power of application. During the remainder of the year he received practical training from Colonel Grey in administrative work, for which he appears well qualified. He was married in July to a daughter of his great uncle, Sáhibzáda Mohabbat Khán. The Nawáb received the high honour of an invitation to attend the Coronation of His Majesty the King which he gratefully accepted, but after making every preparation for proceeding to Europe he found himself on reaching Bombay by sea from Karáchi unable to continue the journey, and was excused from travelling further.

CHAMBA.

Area, 3,216 square miles; population (1901), 127,834; gross revenue, Rs. 3,50,000; race of Chief, Rájpút; tribute, Rs. 5,000; age of Chief, 36. The Chief has no direct male heir.

Chamba.

176. The administration of Chamba was as usual conducted satisfactorily. The State was visited in November 1901 by Sir Mackworth Young, Lieutenant-Governor of the Punjab.

Frontier Affairs.

Present Punjab Frontier.

177. The separation from the Punjab of the Pathán Frontier Districts has already been referred to. In frontier matters the Punjab Government is now concerned only with the affairs of the Baluch tribes on the border of the Dera Gházi Khan District, which has been enlarged so as to comprise the portion of the Kasráni tribe formerly included in the Dera Ismail Khan District. In the hills across the border the inter-tribal boundary of the Kasránís and Ustaránás has been adopted as the southern boundary between the areas in the hills controlled by the Punjab Government and the Chief Commissioner of the North-West Frontier Province respectively.

Conduct of the Tribes.

178. The conduct of the Baluch tribes throughout the year was good. The Laghári-Khosa feud case referred to in last year's report was finally disposed of in September 1901, when 12 Haddiánís (Laghárís) were sentenced to 10 years' transportation and 3 other Haddiánís and 9 Khosás to various terms of imprisonment ranging from 1 to 3 years in addition to fines. Special arrangements were made to keep the Lishári section of the Gurchani tribe, who were responsible for the theft of numerous animals in previous years, well in hand, with the result that they were but little heard of during the year.

Jirgas.

179. As noticed in last year's report, a large number of cases concerning the Zhob Agency which were pending last year were adjourned to the general jirgás or Councils of Elders at Fort Munro held in September 1901. Altogether 170 cases connected with the Zhob and Thal-Chotiáli Agencies were taken up on that occasion, and 136 of these were disposed of. The Deputy Commissioner, Thal-Chotiáli, and the Political Agent, Zhob, attended the jirgás, and arrangements were made for the assembling of minor jirgás at Barkhan and Drug with a view to facilitating the disposal of petty cases between the tribes of the Dera Gházi Khan District and the Thal-Chotiáli and Zhob Agencies and to lessening the heavy pressure of work on the annual Fort Munro Jirgás. These arrangements have worked well, but they are not viewed with favour by the Dera Gházi Khan Tumandárs, and the matter was to be again considered at the Fort Munro Jirgás of September 1902.

Border Military Police.

180. In October 1901 the scheme for the raising of a non-silladári Border Military Police Corps in the Dera Gházi Khan District was started. Owing, however, to the necessity of first obtaining a certain number of officers and men from the Native Army to constitute a training staff, ordinary recruiting could not unfortunately be started until the beginning of January, when the training nucleus of the force arrived and was complete. Since then some 200 men have been enlisted and are under training, but the commencement of the hot weather seriously interfered with the recruiting for the corps; every effort is being made, however, to bring the corps up to strength, and considering the difficulty which has been experienced in inducing the Baluch to volunteer for service, the progress made is very satisfactory on the whole. It is hoped that with the fair start that has now been made recruiting difficulties will gradually disappear.

Season.

181. It is to be regretted that there was practically no rain throughout the hill tracts during the latter part of the year, and the Hill Baluches, who are a pastoral people, were therefore again threatened with scarcity.

Condition of the People.

Scarcity in Hissar.

182. The sources of general information on the subject of the condition of the people have been indicated in Part I of this report. As pertaining to the history of the year under review some notice is necessary of the scarcity in Hissar and the measures undertaken for its relief. In no other district was famine or scarcity present during the year.

The agricultural history of the Hissar District since 1895 may be thus summarized. From 1895 to 1900 there was only one good year, 1897 98, and there were two years of actual famine, 1896-97, 1899-1900. In the remaining two years the harvests were practically failures. In 1900-01 two excellent harvests were reaped, but in 1901-02 there was again an almost entire failure of the crops on unirrigated land, while there was short supply of water in the canal and the people had not fully understood the working of the remodelling scheme. The monsoon rains ceased early in August and there was a complete absence of winter rains. With two actual famines and only two good seasons in the preceding six years it seemed almost certain that the people would not be able to face another total failure of crops, and a return to famine conditions seemed inevitable.

Area, Population and Classes affected.

183. The area affected by the failure of the kharíf and rabi crops on unirrigated land in 1901-02 was practically conterminous with the district, the unirrigated area of which is 3,907 square miles and the population affected 566,804. The distress was chiefly felt by the menial classes, but there were undoubtedly many zamíndárs whose sufferings in the previous years rendered them incapable of meeting this new calamity. The failure of both the unirrigated kharíf and rabi crops was almost complete. The people had not recovered from the famine of 1900 and were quite unprepared for another bad year. Crowds of Bikánerís passed through the district, and, as always happens, created a panic. Prices began to rise at the same time, and owing to the general failure of crops in the Province there did not appear to be likelihood of labour being obtained elsewhere.

Test works.

184. Under these circumstances it was decided to open test works, one in each tahsíl, as necessity became apparent. No test work was, however, actually opened either in Sirsa or Fatahabad, where there had been a better spring harvest in 1900 than in the rest of the district. The work in the Hánsi Tahsíl only remained open for a few days. In Hissar and Bhiwáni the work continued for two months. The maximum and minimum number employed was—

	Maximum.	*Minimum.*
Chaudhríwás, Hissar Tahsíl ...	219	33
Bapoura, Bhiwáni Tahsíl ...	389	235

Prices, however, remained reasonable and stationary, and it was found that ordinary work was procurable, though at a distance. It was therefore soon evident that the works would not be resorted to and they were closed on 8th February 1902.

Gratuitous Relief.

185. At the same time that test works were opened, gratuitous relief operations and poor-houses were started in all tahsíls except Sirsa. The numbers for each form of relief were as follows :—

	Maximum.	*Minimum.*
Gratuitous	2,748	451
Poor-house	190	15

Owing to the distance to which it was necessary to go to find labour, some of the helpless among the menial classes whose relatives would not support them and some *pardah-nashín* women of the distressed Rájpút villages were relieved in their homes. The poor-houses provided for wanderers in the colder weather. In the middle of March three out of four poor-houses were closed, only that at Hánsi remaining open.

Other Relief Measures.

186. In addition to the direct relief thus given liberal advances were made under Act XIX of 1883 and under Act XII of 1884. In the month of March a scheme for giving loans for digging village tanks received the sanction of the Financial Commissioner, and advances were made to the most distressed villages. Suspensions of revenue amounting to Rs. 5,11,274 for kharíf 1901 were given, and this sum together with the outstandings of former years (the whole amounting to upwards of 11 lakhs) was eventually remitted. The gloomy anticipations raised by the failure of the kharíf harvest were happily not fully borne out. The conditions did not amount to a famine, though severe scarcity prevailed. The aid given has been gratefully recognized by the people as going far to preserve the stability of the district.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the publications noted below :—

Realization of the revenue *Surveys* *Settlements* *Land Records** *Government Estates* *Waste lands* *Revenue and rent-paying classes*	...	Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1900 to 30th September 1901.
Surveys (other than land revenue)	...	General Report in the Operations of the Survey of India for the year ending 30th September 1901.
Wards	...	Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1901.]

Realization of the Revenue.

Scope of the report.

187. The latest information is that contained in the Land Revenue Report for the year ending 30th September 1901. Throughout this year the Punjab included the districts which have since been constituted a separate administration under the Chief Commissioner, North-West Frontier. The facts and figures in this section accordingly relate to the Punjab as it existed before the exclusion from it of its frontier districts.

Fixed Land Revenue.

Demand and collections.

188. Out of a total demand on account of fixed land revenue of Rs. 2,22,34,850, Rs. 2,16,01,591 were collected, a percentage of 97·1 as against 79·1 in the year before. As a matter of fact, the provincial percentage would have been considerably higher this year, which was, on the whole, one of excellent crops, if it had not been for the large balances (Rs. 2,66,457) in Mooltan. The greater part of these (Rs. 2,45,402) are, however, purely nominal, owing to the extension of fluctuating assessments during the year taking the place of fixed land revenue, the rent roll on account of which was not reduced until after the close of the year.

Collection of arrears.

189. As might have been expected from a good year following after a series of bad years, the collections on account of previous years were considerable, amounting to Rs. 21,97,852, or to roughly 10 per cent. of the collections on account of the current demand. The largest sums come from the districts of the Delhi Division, where, on account of the severity of the famine, there naturally had been the largest sums under suspension.

Difficulties experienced in collection.

190. In several districts it is noted that considerable difficulty was experienced in getting the revenue promptly paid in, one explanation given being that owing to the large suspensions during a series of bad seasons the Lambardárs had got somewhat slack in the performance of their duties as collectors of revenue for their villages. This was the case in Gurgaon, Gujrát, Ráwalpindi

* In the seventeenth issue of the Volume of Agricultural Statistics published by the Director-General of Statistics detailed figures will be found in the following tables :—

Area Totals—Table 1-H.	Varieties of Tenure—Table 6 I.
Classification of Area—Table 2-H.	Transfers of Land—Table 7 G.
Incidence of Land Revenue—Table 5-F.	Changes in Boundaries—Table 14.

and Karnál, though in the latter district the Deputy Commissioner says it was mainly in the canal-irrigated villages (where the explanation of bad seasons would be inapplicable) that the delay occurred. In Ludhiána the delay is attributed to the prevalence of sickness at the time of the kharíf instalment, and though this cause is not referred to in the case of other districts, it seems clear that it was very generally an important cause of delay. In some districts malarial fever was so prevalent that crops remained uncut long after the usual time owing to there not being sufficient people strong enough to cut them. In Jhang the *baniás* took in grain, to discharge outstanding debts, assets which might have been converted into cash for the payment of revenue. A similar difficulty is noticed as having occurred in Lahore, but here, on enquiry, it was ascertained that the zamíndárs had willingly made over their produce to the money-lenders in liquidation of their outstanding debts. Dera Ismail Khan, Muzaffargarh and Dera Gházi Khan are the only districts in which the Land Alienation Act is urged as a reason for difficulty in collecting the revenue. It is not clear whether the disinclination of the *baniás* to make loans was due to their anticipations, probably much ex-aggerated, as to the effect of the Act or to its actual operation. It must be remembered that the Act came into force on June 8th, 1901. The kharíf collections, therefore, of the year under report could only have been affected, if affected at all, by apprehensions as to the probable results of the measure. Capital is proverbially timid, and it was only to be expected that the impending enactment of the much discussed provisions of the new law should cause a contraction of credit. The Deputy Commissioner of Dera Gházi Khan is probably right in his surmise that undue contraction of credit will prove a merely transient evil, and that the money of the *bania*, which cannot lie idle, will revert to its normal and profitable employment on land or the produce of land. Apart from the above-mentioned difficulties, which are of a special nature, the general opinion seems to be that the current demand was realized easily from the zamíndárs as crops were good and prices high. With reference to Kángra, the Commissioner remarks :—"The year has been an eventless one which is the most satisfactory report."

Causes of increase or decrease in the fixed land-revenue demand.

191. The year under report shows an increase of Rs. 45,360 under the head fixed land revenue compared with a decrease of Rs. 8,935, as noticed in last year's report. The only items which call for any remark are the following :— In Lahore the newly colonized area in the Chunián rakhs accounted for an increase of Rs. 21,236, while an assessment on shops in the colony produced Rs. 1,383; in Amritsar there was an item of Rs. 10,558 on account of resumed *muáfis*; the transfer of the Attock Tahsíl from the Ráwalpindi District to the Hazára District caused a decrease of Rs. 1,46,097 in the revenue roll of the former, and a corresponding increase in the latter; in Pesháwar there was an increase of Rs. 23,824 due to progressive assessments. Mooltan shows a decrease due to the introduction of fluctuating assessment of Rs. 32,720; in fact by far the greater part of this district is now under the fluctuating system.

River action.

192. During the year river action was distinctly favourable, as the net result was an addition of Rs. 19,024 to the fixed revenue demand; a sum very nearly equal to the gross loss by diluvion (Rs. 19,675), though not quite so large as the net gain during the previous year. The largest amount added to the revenue roll of any one district on account of alluvion was Rs. 6,543 in the case of Lahore. In Hoshiárpur, Jhang and Gurdáspur the increases from this cause were each over Rs. 3,000.

Suspensions and remissions.

193. The year under report was one of excellent crops; it is therefore a matter which needs some comment that, notwithstanding the generally favourable character of the seasons, it was found necessary to suspend a sum of Rs. 2,48,159 out of the current demand. The reason was that the monsoon of 1900 was very late in beginning, and when it did come, though generally abundant, it was in some places curiously partial. It was in this way that certain tracts wholly dependent on the rainfall for their crops failed to share in the general prosperity, and as the peasants had nothing to fall back on, owing to previous bad harvests, considerable suspensions became necessary. Practically the whole of the suspensions occurred in the kharíf harvest as the succeeding rabi was much more generally excellent. The tracts which suffered most in the kharíf were parts of Hissar, and

especially the Sirsa Tahsíl, parts of Ferozpóre, the Sharakpur Tahsíl of Lahore, the Bhera Tahsíl of Shahpur, and Jhelum. On the other hand, in Gurgaon, Amritsar and Dera Ismail Khan the suspensions are largely due to excessive rainfall and floods.

Remissions.

194. Out of the suspended balances Rs. 3,39,763 were remitted during the year. Practically the whole of this amount had been under suspension for more than three years, and was remitted under usual revenue rules. The largest sum remitted in any one district was Rs. 1,46,983 in Hissar.

Balances.

195. The year started with a balance of suspended revenue amounting to Rs. 59,35,221 ; it closed with a balance of Rs. 38,30,055. This includes an item of Rs. 4,41,140 in the Jhelum District which, on account of the introduction of the new assessments with effect from last kharíf, it was proposed to remit. Government sanction to this proposal has since been given.

Differentiation in suspensions.

196. The question as to the differentiation between rich and poor revenue-payers in the matter of suspensions has been further advanced during the year, the broad line taken being that a distinction must be drawn between differentiation in times of ordinary depression, and in times during which distress is widely and generally felt and suspensions have to be granted almost wholesale, as in the latter case it is not possible to work on any but broad principles, there being ample time during the following three years to discriminate in detail between those revenue-payers who can pay up or not irrespective of the nature of the subsequent crops.

Balances of the year under report.

197. Of the demand for the year under report Rs. 6,33,259 only remained uncollected as against Rs. 44,67,825 in the year before, which, however, it will be remembered was one of severe famine. The revenue remaining uncollected is distributed thus :—

	Rs.
Irrecoverable	3,08,177
Undetermined	9,397
Recoverable, under suspension	2,14,028
Ditto, not under suspension	1,01,657
Total ...	6,33,259

The large increase in the irrecoverable balance from Rs. 74,703 to Rs. 3,08,177 is mainly due to Mooltan, where, owing to the introduction of fluctuating assessments, Rs. 2,45,402 had to be transferred to this head; deducting the Mooltan balance the irrecoverable balance of the year under report is Rs. 62,775, or less than that of the year before.

The undetermined balance of Rs. 9,397 for the year is small. The major part of it is reported from Gurgaon, and there nearly the whole will shortly be converted into irrecoverable. The recoverable balance of suspended revenue is only Rs. 2,14,028 as compared with Rs. 41,31,747 during the preceding famine year. The subject has been dealt with above. The amount of recoverable revenue not under suspension is only Rs. 1,01,657 for the Province as compared with Rs. 2,22,038 in the year before. The districts which show the largest amounts under this head are—

	Rs.
Ferozepore	18,554
Mooltan	21,055
Gujránwála	16,629
Dera Ismail Khan	10,453
Dera Gházi Khan	7,203

As regards Ferozepore, the Deputy Commissioner considers that the greater part of what is shown as recoverable but not under suspension in the Muktsar Tahsíl will have to be suspended in view of the poorness of the present harvest. This hardly seems satisfactory. In Mooltan nearly the whole of the outstanding balance has since been collected. In the case of Gujránwála the Commissioner does not consider the heavy balance shows a satisfactory state of affairs. In Dera Ismail Khan the balance is mainly in the Bhakkar Tahsíl, and is attributed to delay in the preparation of the *báchh* papers by the Patwárís. The Dera Gházi Khan balance has since been got in to a large extent.

Balance of preceding years.

198. At the close of the year the balance on account of former years amounted to Rs. 40,38,883 as against Rs. 21,49,573 at the end of the year before. This was of course due to the large suspensions which had to be made during the famine year of 1899-1900, most of which are still outstanding. Of this the amount which is shown as recoverable, *i.e.*, not under suspension, is Rs. 34,124, of which quite an insignificant sum is in the Delhi Division. The only considerable sums are Rs. 6,938 in Gujránwála, and Rs. 14,371 in Ferozepore, in regard to which the same remarks apply as have been made with reference to the recoverable balances outstanding for the year under report. It is mainly owing to the balances in these two districts that the figures under this head show such a large increase this year.

Fluctuating Land Revenue.

Total fluctuating revenue.

199. In the case of the demand on account of fluctuating land revenue temporarily excluded from the fixed land revenue roll the figures call for little comment; there has been an increase in the Province under this head of Rs. 10,658; but in the case of fluctuating revenue permanently excluded from the fixed revenue roll there has been a considerable increase, the total standing at Rs. 31,06,830 as compared with Rs. 17,07,746 in the year before. Generally, the increase may be accounted for by the large increase in the *sailáb* area, as this area is usually under fluctuating assessment. Other notable increases are in the case of Mooltan, where the new assessment is almost entirely on the fluctuating system, and of the districts affected by the Chenab Colony.

Fluctuating assessments of canal-irrigated lands.

200. Under this head there has been an increase this year from Rs. 8,61,743 to Rs. 18,04,225. Every district which contributes collections under this head shows an increase as indeed was only to be expected owing to the plentiful supply of canal water which was available, but in the following cases the increase was exceptionally large:—Mooltan (Rs. 17,926 to Rs. 4,53,176), but here revision of assessment was also the main contributing cause; Jhang (Rs. 4,48,792 to Rs. 7,09,478), on account of the expansion of the Chenab Colony; and Montgomery (Rs. 74,737 to Rs. 1,88,823), on account of its inundation canals.

Miscellaneous Land Revenue.

Total Revenue.

201. The total income under this head amounted to Rs. 13,25,398 as against Rs. 18,48,165 in the year before, and therefore shows a considerable decrease. The greater part of this is due to Jhang on account of the Chenab Canal Colony, where in 1899-1900 Government estates, worth Rs. 1,74,121, and waste land, worth Rs. 9,72,995, were sold; whereas in the year under report the former column is blank, and in the latter the figure amounts to only Rs. 2,38,791. On the other hand, the large increase under the head "Other items" (Rs. 49,282 to Rs. 3,15,023) is due to collections on account of temporary cultivation in Jhang, as it was not found possible to make the necessary transfers to the heads concerned before submitting the district report. The increases under the head "Sale of Government estates (Rs. 14,682 to Rs. 40 958)" and "Sale of waste lands, including nazarána (Rs. 2,809 to Rs. 40,958)" in the Gujránwála District are also due to the expansion of the Chenab Canal Colony.

Single-harvest cultivation.

202. The increase under the head "Rents of land leased for a single year or harvest" is considerable, *i.e*, from Rs. 1,65,739 to Rs. 2,01,352; and, as explained above, it is really considerably greater owing to the inclusion of the Jhang receipts under the head "Other items." It seems probable, however, that receipts under this head in the colony will show a marked decrease in future, at any rate until the contemplated extensions have been completed; as, owing to an increase in allotments, the area available for temporary cultivation is now comparatively inconsiderable.

Grazing Revenue.

203. The figures for *tirni* show a slight decrease, *i.e.*, from Rs. 1,46,835 in 1899-1900 to Rs. 1,31,669 in the year under report. This is almost entirely due to Mooltan and Jhang. In Mooltan the decrease is attributed to the introduction of the new *tirni* assessments, while in Jhang the explanation for the fallingoff in this income, as well as in that from *sajji*, is the increasing amount of waste land which has come under colonization.

Balances.

204. The total of unrealized balances under the head of Miscellaneous Land Revenue, which in 1899-1900 rose from Rs. 2,86,858 to Rs. 4,06,682 on account of the pressure of famine, has now fallen to Rs. 3,66,084.

MISCELLANEOUS.

Processes for the collection of land revenue.

205. The following table shows how the number of processes issued during the year compares with the numbers of the three preceding years :—

Year.	Writs.	Warrants.
1897-98	27,329	18,034
1898-99	31,302	18,579
1899-1900	32,117	20,327
1900-01	31,462	24,320

Payment of revenue through the Post Office.

206. The practice of paying land revenue through the Post Office appears to be generally increasing in popularity where it might be expected to do so. During the year 1901-02 land-revenue money orders numbering 18,514 of the aggregate value of Rs. 13,79,819 were issued as against 14,570 orders of the value of Rs. 9,74,698 issued during the preceding year. There was also an increase of 3,272 in number and Rs. 66,310 in value of the money orders issued for remittance of other sums due to Government. There are some districts and tahsíls where, owing to natural circumstances, it will never gain ground, and in drawing conclusions such should be omitted from consideration. These are places where the treasury is conveniently placed either as regards distance or as regards facilities for reaching it. Where the system is in vogue to any extent it is strongly urged in the district reports that the amount of commission charged by the Post Office is excessive. The Deputy Commissioner of Gujrát points out, and with a great deal of reason, that Tahsíldárs and Tahsíl underlings discourage the payment of revenue by money order, the former because, usually in that district, only those Lambardárs resort to money orders who have not the full instalment ready, and accordingly try to avoid appearance before the Tahsíldár, and the latter for their private reasons. Whether a Lambardár remits his revenue by money order or carries it to the treasury himself must always, apart from the reasons discussed in the case of Gujrát, but which are probably capable of wider application, be a question of profit and loss for the Lambardár. The largest sum mentioned in the reports as having been sent as one remittance through the post is Rs. 823 in Jhang, and the smallest Re. 0-0-9 is also reported from that district.

Surveys.

TOPOGRAPHICAL WORK.

Himalaya Party.

207. The Himalaya Survey Party of the Imperial Survey Department was at work during the year (ending 30th September 1901) in the Kángra (including Kulu) and Hoshiárpur Districts and also in preparing a topographical map of Simla showing boundaries of estates.

Outturn of work.

208. The outturn of the field season's work was as follows :—

	Square miles.
Detail survey on 1-inch scale in Kulu	487·5
„ „ „ 2-inch „ „ Hoshiárpur and Kángra Districts ...	950·7
„ „ „ 4-inch „ „ Kulu	59·1

Of the total area surveyed on the 1-inch scale in Kulu 376·3 square miles were forest lands. In addition 49·8 square miles of forest on the 4-inch scale, and 0·25 square miles on the 8-inch scale, comprised in 65 blocks, were surveyed.

The cost-rate of each description of work per square mile is as follows :—

	Rs.
Detail survey on 8-inch scale	78
„ „ „ 4-inch „	
„ „ „ 2-inch „	60
„ „ „ 1-inch „	25

Simla Survey.

209. During the winter months out-door work on the Simla Survey was discontinued pending the completion of the demarcation of estate boundaries and fixing of boundary pillars, the setting up and plotting of traverses being continued in the office. Early in April work was re-started by four sub-surveyors, two more being sent from the Punjab Detachment in June to hasten the completion of the survey; during the rains four sub-surveyors were employed in plotting, while the remaining two took advantage of occasional breaks to do revision work.

The year's outturn consists of 1 main traverse, 11 sub-traverses, and 135 estate boundaries, giving a total of 1,220 stations fixed. The detail of 15 main traverses and 33 sub-traverses has been plotted. In addition to the above some further triangulation was found necessary in order to provide check points about a mile apart along the outer boundary and main traverses.

Traverse Surveys.

Riverain Surveys.

210. The original programme of the Punjab Detachment was to run traverses over the Hazára District, but it was diverted to the Montgomery District and took up the work of traversing there, fixing the trijunctions of villages. In addition the commencement of a system of Riverain Traverse Surveys was made. These surveys are being carried out in pursuance of the policy of substituting fixed for fluctuating boundaries along rivers, both for purposes of jurisdiction, as between Native States and British territory and also for the settlement of claims of proprietorship.

Boundary Demarcation.

Boundaries of Jurisdiction.

211. A fixed boundary of jurisdiction has been substituted for a fluctuating river boundary by order of Government between the Native State of Bahawalpur and Dera Gházi Khan, and arrangements for a fixed boundary between that State and the Muzaffargarh and Mooltan Districts are approaching completion. A fixed boundary has also been laid down between the Kapurthala State and the Gurdáspur District on the Beas. Some small boundary disputes with other Native States have also been decided; and there are now few places where there is any doubt or dispute as to the boundary of a Native State.

Boundaries of proprietary rights.

212. The passing of the Punjab Riverain Boundaries Act (No. I of 1899) has made it possible to lay down fixed boundaries of proprietary right in place of the old fluctuating boundaries along the course of the rivers, which gave rise to frequent disputes and caused a great deal of unnecessary litigation. Fixed boundaries have been determined under the Act on the Ravi in Mooltan, on the Chenab between Mooltan and Muzaffargarh, and on the Beas between Gurdáspur and Hoshiárpur. Fixed boundaries have also been demarcated, though not yet finally sanctioned, on the Jhelum between Jhelum and Gujrát, and on the Sutlej between Lahore and Montgomery on the one side and Ferozepore on the other.

Settlements.

Settlements now in progress.

213. *Sirsa-Fázilka.*—Work in the Fázilka Tahsíl is now practically complete. The new assessments have been announced and will come into effect from kharíf 1902. The increase is Rs. 1,71,000 per annum; besides which there will be a large enhancement in the occupiers' rates on irrigation from the Sirhind Canal, the introduction of which since last settlement has revolutionised agricultural conditions in this tahsíl and made it very prosperous. Measurements are in progress in the Sirsa Tahsíl, and operations here will probably last a year longer.

Muzaffargarh.—The revision of the record is now practically complete and the new assessment has been introduced in the Sinánwan Tahsíl. Assessment reports have been submitted for the remaining two tahsíls, and operations should be completed during the year now current. The anticipated increase of assessment is Rs. 1,22,000, or 21 per cent.

Dera Ismail Khan.—This charge includes the two tahsíls which have been incorporated in the Miánwáli District. Here also the revision of the records is practically complete and assessment reports for two-thirds of the district are in process of submission. The settlement is an unusually heavy charge, and will not be finished for at least another year.

Ráwalpindi.—Revision operations have been commenced in the Attock Tahsíl, and are likely to be completed in about two years, as the maps are accurate and remeasurements are not necessary.

Jhang.—Operations were commenced during the year in Jhang, and remeasurements are now in full swing. A large enhancement of revenue is expected on the lands irrigated by the Chenab Canal.

Háfizabad.—Since the close of the year operations have commenced in the Háfizabad and Khángah Dográn Tahsíls of the Gujránwála District, where also the introduction of canal irrigation has made a large increase of land revenue possible.

214. Preparations are being made for the commencement of revision operations in the remaining tahsils of Ráwalpindi in October 1902 and in Gurgaon and Miánwáli in the following year. Proposed future settlement operations.

Land Records.

215. As this section has now for the first time been prescribed by the Government of India it will be appropriate to describe in some detail the system of maintaining land records in this Province. The system of survey as a part of Settlement operations has been described in the preceding chapter, but it is necessary to refer to it again in explaining the duties of the Patwári in connection with the maintenance of the field map and registers.

Patwari and Kanungo Agency.

216. The Patwári is of the utmost importance to our revenue system. On his being duly trained and being competent carefully to prepare the village records and statistics, really depends the hope of diminishing the labour and trouble to the people which the recurrence of Settlement proceedings occasions. Patwaris.

In the village system of old days Patwárís, like the artisans and watchmen, who were practically included among village officers, were paid a share of the grain or allotted patches of land in virtue of their office. As now defined in Section 3 of the Punjab Land Revenue Act, the term village officer means a chief headman, headman or Patwári. Rules regulating the appointment, duties and remuneration of village officers have been made by the Financial Commissioner under Section 28 of the Act, and a village officer's cess is imposed by the Local Government under Section 29 for remunerating village officers and for defraying other expenditure directly connected with their supervision or with the performance of their duties. The cess required for the remuneration of Patwárís in recent settlements has been fixed at Rs. 6-7-4 per cent. of the land revenue. The proceeds of this cess form the Patwár Fund which has hitherto been funded by districts, but which will in future be amalgamated into a single fund for the whole Province.

217. The pay of Patwárís has been improved in recent years in many districts, and it now varies from Rs. 10 to Rs. 15 a month, exclusive of the share of the fees levied on mutations, and copying and inspection fees. Patwari's pay.

218. Generally speaking, only men who have passed at least the Middle School Examination are now admitted as candidates for the appointment, and they are required to undergo a special training and to pass a qualifying examination Qualifications.

before being appointed. A hereditary claim to appointment is no longer recognized; but preference is given, when other conditions are fulfilled, to members of agricultural tribes. Patwári Schools have been organized, the old ignorant Hindi-writing Patwári has been got rid of, and decently paid, well taught Urdu-writing men are everywhere to be found, who can survey, map neatly and accurately, and prepare their own records, whereas formerly they stood by, while a "Munsarim" wrote the returns and forms for them.

Circles.

219. A Patwári is not appointed to each village, but to a circle which may comprise on an average 4 or 5 villages, as determined by the Commissioner, and there may for special reasons be an Assistant Patwári in large and difficult circles. There are at present 7,785 Patwáris employed in the Province, all but 46 of whom have passed the departmental test.

Legal status and duties.

220. The Patwári is a "public servant" within the meaning of the Indian Penal Code, though he has no powers as a "Revenue Officer" under the Land Revenue Act. He is required to live with his family in his circle, which he cannot leave without permission. He is prohibited, under pain of dismissal, from engaging in trade, or lending money to agriculturists or directly or indirectly acquiring land within his own circle otherwise than by inheritance. He notifies to the tahsíl any interest in land possessed by him within or outside his circle and is not kept in the service should such interest be found to interfere prejudicially with the performance of his duties. Borrowing money from an agriculturist in his circle or being in a condition of serious embarrassment may also be a ground for the Patwári's dismissal. The Patwári is required to report to the Tahsíldár any calamity affecting the land, crops, cattle or the agricultural classes, and to bring to notice alluvial and diluvial action of rivers, encroachments on Government lands, the death of revenue assignees and pensioners, progress of works made under the Agricultural Loans and similar Laws, and the emigration or immigration of cultivators. He is expected to be ready to make surveys and field inspections, and to aid in relief of agricultural distress, and in elections under the District Boards Act. It is his duty to allow any one interested to inspect his records, and he has to supply extracts from them on receipt of fees, for which a scale is provided. When revenue collections are in progress, he must furnish any information that may be required to facilitate the collections, but he himself is not permitted to take any part in the collection of the revenue. He may be called upon, under certain circumstances, to make maps to illustrate Police enquiries in cases of serious crime.

Field maps and registers of title.

221. The basis of the Patwárí's records is the field map or revenue survey map of the estate which is prepared at the settlement of the district. A local standard of measurement called a "*karam*" is used. The "*karam*" varies in length in different districts, but in the majority of districts it is 66 inches in length. The maps are usually prepared on the scale of 40 karams to the inch or 24 inches to the mile. The system of measurement adopted in all districts which are sufficiently level to admit of it, is known as the square system. A series of squares, the sides of which are 200 karams in length, are first of all laid out, the corners of the squares being marked by strong stakes driven into the ground. The mapping sheets are divided into similar squares, the sides of which are 5 inches in length, and the position of the corners of the fields is ascertained by taking offsets from the nearest side or diagonal of the square. Each plot of land lying in one spot in the occupation of one person or of several persons holding jointly, and held under one title, is ordinarily measured as a single field. Large areas may be broken up into convenient fields; and in the case of valuable lands cultivated by tenants who are frequently changed, care is taken that the measurements should show the boundaries of the parcels of land in which the land is usually held for cultivation or irrigation. The areas of fields, therefore, vary largely from a fraction of an acre to several acres. Every field has a separate number given to it, which it usually retains during the course of the settlement, unless it is partitioned between different owners, or for any other sufficient reason an alteration of the field map is necessary. Thus each field belongs to a single owner or to several owners holding jointly, and is cultivated by a single cultivator or cultivators holding jointly. It therefore becomes possible to group

the fields in each estate by proprietary holdings, and within each proprietary holding by cultivation holdings. And the register showing this grouping of fields by proprietary and cultivation holdings is the most important of the records comprised in the record-of-rights of the estate. Columns are provided in the register to show the amount of the land revenue payable by each proprietary holding, and the register is therefore known as the "*Jamabandi*," or register showing the distribution of the revenue. A revised edition of the Jamabandi is prepared in the Punjab for each estate every fourth year, and the work is so arranged that each Patwári has to prepare a new Jamabandi each year for about one-fourth of the villages in his circle.

Mutation and crop registers.

222. The most important subsidiary registers which are necessary to keep the Jamabandi up to date are the mutation register, in which changes in proprietary ownership and hereditary tenants are shown, and the crop inspection register (Khasra Girdawari), in which, besides the record of the crop grown each harvest in each field, changes in cultivating possession are also indicated. All transfers of land by inheritance, gifts and exchanges, mortgages, redemptions of mortgages and sales are reported to the Patwári, who makes a note of the change in his mutation register. When a Revenue Officer visits a village he attests the mutations recorded in the register, passing an order that they are accepted or rejected. The principles guiding the Revenue Officer in accepting mutations are laid down in the Punjab Land Revenue Act, and only the changes sanctioned by the Revenue Officer in a formal mutation proceeding are incorporated in the revised Jamabandi.

The Crop Inspection Register follows the order of the field numbers, no attempt being made in it to group the fields belonging to one proprietor together. A crop inspection is made by the Patwári for each harvest. The inspection of the autumn harvest commences ordinarily on the 1st October and of the spring harvest on the 1st March. The extra rabi crops, such as melons, tobacco, &c., require an additional inspection after the 15th April. The Patwári notes against each field the crop grown, and any changes in the cultivating possession which have occurred. In this way accurate crop statistics for each harvest are obtained, and any changes which have occurred in rights or possession or field boundaries are brought to light.

Note-Books.

223. The records thus prepared besides their value in revising the Jamabandi form the basis of the Statistical Note-Books which are prepared for each village. These note-books are arranged so as to enable the Patwári to keep a continuous record of the statistics relating to each village during the course of the settlement. The statements kept up are the following :—

(i) The yearly register of area, showing for each year the total cultivated and uncultivated area, the class of cultivation with reference to the means of irrigation and the number of wells in use.

(ii) The crop returns of each harvest, showing the matured area of crops of different kinds at each harvest.

(iii) The yearly revenue account.

(iv) The yearly total of areas transferred, classified according to the nature of the transfer.

(v) A quadrennial abstract of ownership, mortgages and revenue assignments.

(vi) A quadrennial abstract of cultivating occupancy.

(vii) The statement of prevailing rents.

(viii) Statistics regarding the number of agricultural stock and carts and ploughs.

Similar books are kept in the Tahsíl and District Offices. Formerly two sets of these books were kept up, one in Vernacular and the other in English. In 1897 a saving of labour was effected by replacing these note-books by bilingual note-books with headings in English and Vernacular. In this book entries are made in English numerals, and the local measure is converted into acres.

Chapter II. ADMINISTRATION OF THE LAND.

Kanungos.

224. The Patwári is under the immediate supervision of a circle supervisor known as the Kánúngo, the title of the old Muhammadan institution being thus retained. Kánúngos are recruited to the extent of two-thirds of their numbers from Patwárís of at least three years' service; the rest are selected. The qualifications required in the latter case are—the educational test of having passed the Entrance Examination of the Punjab University, the age limit of being under 25 years old when accepted, and a practical training by at least two years' service as a Patwári or an Apprentice Patwári. All Kánúngo candidates are required to pass a departmental test and to obtain a certificate of efficiency from the Director of Land Records before they are confirmed in the appointment.

Pay and prospects of Kanungos.

225. On first appointment a Kánúngo receives Rs. 20 per mensem; after serving a year and obtaining a certificate of efficiency he is paid Rs. 25 per mensem, while one-fourth of the staff in each district receives Rs. 30 per mensem. A Kánúngo who has been in Government service for five years, of which two have been as Field Kánúngo, is eligible for nomination as a Náib Tahsíldár candidate. In addition to the pay referred to above one-half the number of officials of this class employed in each district are given a field allowance of Rs. 5 and Rs. 10 per mensem each for good work.

Classes of Kanungo.

226. Kánúngos are divided into three classes:—

(1) Field Kánúngos, who have the direct supervision of a certain number of Patwárís.

(2) The Tahsíl Office Kánúngo in charge of the records at the tahsíl.

(3) The District Kánúngo, who is an inspecting officer of the land record work of the district, and who maintains the statistical registers relating to the whole district and is responsible for the custody of all the land records filed in the District Office.

There are 373 Field Kánúngos employed in the supervision of the 7,785 Patwárís of the Province.

Duties of Field Kanungo.

227. While the Patwárís are inspecting crops or preparing the distribution list of revenue demand or mutation papers, or are engaged in remeasurements of land which has been subject to alluvial action, the Field Kánúngo's whole attention should be given to the supervision of this work. He has to attest every entry in the mutation register, and is responsible for the correctness of all the Patwárís' returns. He must reside in his circle, and be constantly moving about visiting each Patwári's circle once a month during the busy season. He keeps a diary and also a register of Patwárís showing the character of each Patwári's work. The Field Kánúngo attests all the entries in the revised Jamabandi by verification from the agriculturists, and when the Jamabandís have been completed and brought to the Tahsíl Office at the end of August he again checks them all thoroughly, seeing that all mutations allowed by the Revenue Officers have been duly incorporated and that the abstracts filed with the Jamabandís are correct.

Duties of Office Kanungo.

228. It is the duty of the Tahsíl Office Kánúngo to maintain Statistical Note-Books in the same form as the village note-books, for each village and assessment circle, and for the whole tahsíl. He also has the custody of the Patwárís' records after they have been filed.

District Kanungo.

229. The District or "Sadr" Kánúngo is a promoted Kánúngo in receipt of a salary of Rs. 60 per mensem. District Kánúngos of not less than three years' standing are eligible for admission to the register of Tahsíldár candidates. There is one official of this class for each district. He lives at head-quarters and compiles the district statistics, as the Office Kánúngo does those of the tahsíl, the forms, of course, being the same. As an older officer of considerable experience his inspection should be valuable, and he is expected to go on tour for 15 days in the month from 1st October to 30th April, and for the rest of the year to inspect at least one tahsíl in the course of each month. He is generally responsible that all orders are carried out by the Field Kánúngos and Patwárís in his district. He keeps a register of all Patwárís in a form which shows the particulars of their appointments, what villages are in their circle, what amount of revenue is involved, what number of field entries (*i.e.*, number of field index entries and number of Jamabandi entries) each has to look after; and he has a note at the end showing the character of each Patwári's work.

230. The Kánúngos are in their turn inspected by the Tahsíldár and his deputy, who are expected to verify the crop entries field by field in estates subject to the fluctuating system of assessments, and 25 per cent. at least of the entries made in the Jamabandi of each estate. The Revenue Extra Assistant Commissioner sees that this duty is carried out properly and efficiently. **Duties of Tahsildar and Revenue Extra Assistant Commissioner.**

231. Finally, it is the duty of the Director of Land Records to supervise and inspect the village records of every district and the statistical records of Tahsíl and District Offices connected therewith, and to supervise and inspect the Patwári and Kánúngo agency of the Province. In discharging these duties the Director is guided by the rules issued by the Financial Commissioner under the Land Revenue Act and by other orders of the Financial Commissioner in force in each district, and brings to the notice of the Collector or other superior authority, as occasion may require, any failure to give effect to those orders efficiently. On all matters of detail connected with these subjects the Director's recommendations are accepted as those of an expert specially charged with duties of a technical character. But all important questions are referred by the Director for the orders of the Financial Commissioner. **Duties of Director of Land Records.**

Land Record Establishments in 1901.

232. The number of qualified candidates for the post of Patwári is amply sufficient throughout the Province. In only 7 districts, *viz.*, Karnál, Ambala, Kángra, Hoshiarpur, Siálkot, Gujrát and Hazára, was it found necessary to open schools for training new candidates in their duties. The school at Ambala is still open. In the other places mentioned the final examination has concluded with the result that 371 candidates out of a total number of 526 succeeded in passing the examination. All these candidates were men who had passed either the Middle School or Entrance Examination of the Punjab University. The service is now well equipped with qualified men, who, as a rule, discharged their duties satisfactorily. The brunt of the census work fell on Patwáris, who got through this additional work creditably. **Patwaris.**

233. Examinations of candidates for the post of Kánúngo were held at 10 selected centres, *viz.*, Delhi, Karnál, Simla, Kángra, Jullundur, Mooltan, Lahore, Ráwalpindi, Hazára and Dera Ismail Khan; at different times of the year 254 candidates from British Districts and 33 from the Native States of Bhartpur and Alwar presented themselves for examination, with the result that 171, or nearly 60 per cent., were successful, and 138 who had received practical training in the duties of Patwáris for not less than two years were granted certificates of efficiency. Of the 287 candidates 124 were old Patwáris and the remainder Entrance-passed men or persons of higher educational qualifications, 3 of them being B. A's. **Kanungos.**

Statistical information derived from the Land Records.

234. Information regarding crops and irrigation will be found in Chapter IV. Not the least important statistics furnished by the Land Records Agency are those relating to changes of title. The figures in the following paragraphs are those for the year ending September 30th, 1901. **Registration of titles.**

235. The number of mutations attested during the year has decreased from 708,144 to 682,478, or by 25,666. This is due to smaller number of transfers having been brought to notice rather than to any laxity on the part of attesting officers, as in spite of the decrease it has been possible to reduce the number of pending cases from 111,102 to 90,691, or by 20,416. In the Delhi Division there was a considerable increase in the number of attested cases in the districts of Hissar, Rohtak, Karnál and Ambala, but in Gurgaon, Delhi and Simla the numbers fell off. The districts of the Jullundur Division show a decrease in each case. Mutation work in the Hoshiárpur District seems very heavy, as, although as many as 43,475 cases were attested during the year, the **Mutations.**

number of cases remaining unattested at the end of the year were 13,516. In the other districts of the Division the number of pending cases is smaller than that at the end of last year. In the Lahore Division more cases were disposed of than last year in all districts except Mooltan and Amritsar. The decrease in the former district is due to the termination of settlement and consequent reduction of the Revenue staff. In Amritsar the crop inspection work was extremely heavy. In the Ráwalpindi Division the number of pending cases has been reduced considerably in every district. The district of Dera Gházi Khan shows great activity in the disposal of mutations.

Transfers.

236. As regards those classes of transfers by which the condition of the agricultural classes is generally gauged, it is to be noted that mortgages and redemptions have decreased by a little over 6 per cent. each, while the number of sales has increased from 66,125 to 72,629, or 9·8 per cent. The excess of the total area mortgaged over the area redeemed amounts in thousands of acres to 157 as compared with 209 of the previous year, but of this 157 as much as 128 was cultivated, so that the proportion of the cultivated to the total area mortgaged was as high as 82 per cent., which is as high as the highest proportion in the past eleven years. This seems to be due to growing expansion of cultivation and to greater credit attached to crop-growing land of which the profits are shared by the money-lenders in lieu of interest or repayment of the principal debt.

Mortgages.

237. The excess of mortgage money borrowed over money paid off amounts to Rs. 1,13,54,003 as against Rs. 1,26,34,203 last year, but it is difficult to say if the amount really represents the amount of the fresh burden on land, as in cases of re-mortgages, which are by no means uncommon, the first mortgage is shown as redeemed on the mutation register and the second mortgage incorporates the debt secured in the first instance also. Whatever the amount of the fresh debt on the land may be, there can be no doubt that the effect of good harvests is not traceable in the statistics of redemptions. As the statistics relate to the transfers attested before the 15th June 1901, it is rather too early to expect the returns to show that large redemptions followed bumper harvests. The kharíf produce came into the zamíndárs' hands at a time when many of them had reached the point of starvation after a succession of bad harvests, and the surplus of the production of rabi could hardly have been disposed of earlier than June.

Sales.

238. As regards sales the total area transferred is the largest on record in the past decade. This is undoubtedly due to the feverish activity of creditors to secure their debts and complete their title to lands before the coming into force of the Land Alienation Act, the restrictive effect of which will appear in next year's record. The price per acre paid is about the same as last year, *viz.*, Rs. 41·7, but the revenue per acre has decreased from Re. 0·53 to Re. 0·47 per acre. This indicates that the zamíndárs have been able to secure better prices for worse lands, although some portion of the increase in price must have been absorbed in liquidating the ever-growing interest at exhorbitant rates.

Area now under mortgage.

239. The total area now under mortgage was 5,681,276 acres against 5,286,029 acres in the previous year. The cultivated area during the same period was 3,781,708 and 3,538,345 acres respectively. The increase in total area amounts to 395,247 acres, although the addition made by net mortgages in the year is 156,600 acres only. The difference is due to the fact that while the statistics of transfers are made every year, the area encumbered with usufructuary mortgage of a village is attested every fourth year, and as the quadrennial attestation of villages takes place in rotation, the total area under mortgage for the whole Province represents the actual state of affairs of one quarter of the villages in the country, the statistics for the remaining three quarters of estates being taken from the result of quadrennial attestations held in the previous three years. The totals, as they are, indicate that 8·6 per cent. of the total area and 13 per cent. of cultivated area are under mortgage.

The districts in which the greatest and least proportions of the total cultivated area have been mortgaged are as follows :—

Greatest.		Least.	
District.	Percentage of total cultivated area mortgaged.	District.	Percentage of total cultivated area mortgaged.
Gurdáspur	25·5	Rohtak and Gujránwála	10·0
Siálkot	25·1	Jhelum	9·0
Dera Gházi Khan	18·7	Montgomery	7·8
Mooltan	17·7	Karnál	7·0
Amritsar	17·0	Hissar	5·6
Gujrát	16·1	Jhang	4·3
Kángra	16·2		
Gurgaon and Shahpur	15·9		
Muzaffargarh	15·3		
Ambala	15·2		

It is remarkable that the districts of Hissar and Rohtak, which suffered most in the recent famine, and the districts of Jhang and Gujránwála, which have enjoyed the prosperity resulting from the Chenab Canal irrigation, are among the least encumbered districts, while some of the tracts more secure than Hissar and Rohtak figure on the opposite side. It is to be remembered that in addition to insecurity of crop pressure of population on the soil is a potent cause of indebtedness.

240. The consideration money for land mortgaged, redeemed and sold is shown for the past ten years in the table below :— **Price of land.**

Year.	Price per acre cultivated.			Number of years' purchase of revenue represented by consideration money.		
	Mortgages.	Redemptions.	Sales.	Mortgages.	Redemptions.	Sales.
	Rs.	Rs.	Rs.			
1891-92	44	32	56	36	26	53
1892-93	46	32	59	42	27	61
1893-94	50	34	56	44	20	57
1894-95	50	33	64	41	29	62
1895-96	51	32	59	44	32	56
1896-97	53	39	71	48	36	65
1897-98	58	43	73	52	36	70
1898-99	60	45	75	52	37	72
1899-1900	59	47	74	53	38	73
1900-01	61	47	77	55	39	89

The increase in the number of years' purchase of revenue represented by consideration money in the case of sales is remarkable. The whole

of this table shows very clearly the gradual, though practically unchecked, rise in the price of agricultural land, which has been the natural consequence of improved communications, and the various circumstances conducive to the rise in price of agricultural produce. It will be a matter of much interest to watch the statistics of the next five years and to trace the effect upon the price of agricultural land of the operation of the Alienation of Land Act.

Waste Lands and Government Estates.

General.

241. The table in paragraph 97 above shows an area of 2,501,417 acres held on lease from Government. The greater portion of this area is situated in districts in which schemes of colonization have been or are being carried into effect. The largest areas are in the undermentioned districts:—

District.	*Colonization scheme.*	*Area. Acres.*
Jhang and Gujránwála ...	Chenab Canal	*1,761,917*
Mooltan	Sidhnái Canal	*340,760*
Montgomery	Lower Sohág-Pára...	*141,714*
Shahpur	Jhelum and Inundation Canals ...	*74,554*
Lahore	Lahore Rakhs	50,639

The above areas do not exactly correspond with the areas colonized, as both on the Chenab and on the Sidhnái and Sohág-Pára Canals there are additional areas in the hands of auction purchasers and lessees who have acquired proprietary right. In Mooltan, Montgomery and Lahore there are Government lessees holding lands outside colony limits. The Shahpur leases are held mostly by local men. The colonization scheme for the lands commanded by the Jhelum Canal had not during the year under report been brought into operation. The provisions of the law affecting Government Tenancies are described in the 'Land Tenures' section of the last chapter.

Chenab Colony.

Census figures.

242. The Chenab Colony returns already a population of 791,861, of whom 453,861 are males, there being only 745 females to every 1,000 males, as yet, because the earlier settlers have only now begun to bring their families into the colony. Migration statistics show that of this population 532,187 (of whom 42·3 per cent. were females) have come into the colony from other districts. This leaves 259,674 residents who are either inhabitants of the colonized area (Bár Nomáds and others) or children born to immigrants within the limits of the colony. The districts which have contributed most immigrants are given in the margin. It will be seen that Siálkot has sent over 100,000, no other district approaching this number. Amritsar comes next with nearly 68,000 and Jullundur with close on 57,000.

District or State.	*Immigrants.*	*District or State.*	*Immigrants.*
Siálkot ...	103,390	Ferozepore ...	15,048
Amritsar ...	67,963	Ambala ...	8,614
Jullundur ...	56,983	Mooltan ...	7,777
Gurdáspur ...	43,593	*Patiála* ...	4,281
Hoshiárpur ...	35,099	Jhelum ...	4,242
Lahore ...	28,620	*Kapurthala* ...	3,968
Guirát ...	25,352	Hissar ...	1,834
Ludhiána ...	17,807	Ráwalpindi ...	1,736
Shahpur ...	16,156	*Baháwalpur* ...	1,046

The colony is made up of six tahsíls which with their present populations are noted in the margin.

Tahsíl.	*Population, 1901.*	*Tahsíl.*	*Population, 1901.*
Khángah Dográn ...	133,780	Toba Tek Singh ...	125,684
Lyallpur ...	263,541	Jhang (Colony) ...	28,548
Samundri ...	157,285	Chiniot ...	83,023

These tahsíls were thus constituted:—Tahsíl Khángah Dográn almost entirely consists of the southern part of the tahsíl of Háfizabad in the district of Gujránwála, with a few villages of Tahsíls Chiniot (in Jhang) and Gugera (in Montgomery); the Lyallpur Tahsíl consists of parts of the former tahsíls of the Chiniot and Jhang: Tahsíl Samundri was carved out of the

tahsíls of Lyallpur and Jhang: and Tahsíl Toba Tek Singh out of Tahsíls Lyallpur, Jhang and Shorkot, also in the Jhang District. The remaining two tahsíls in the colony are portions of the old tahsíls (Jhang and Chiniot) of the Jhang District.

Progress in colonization.

243. An account of the working of the colony for the year ending 30th September 1901 will be found appended to the Land Revenue Report of that year. The net area allotted during the year was 193,941 acres, or slightly less than that allotted during the preceding year; but the process of allotment has become more difficult lately as such an increasingly large proportion of the work is taken up in allotting the remaining areas in partially allotted estates. The total area allotted up to the end of the year was 1,664,526 acres. The cultivated area shows on the whole a considerable increase, *i.e.*, from 1,138,697 to 1,453,942 acres, the greater part being due to large expansions of cultivation on the Gugera Branch which more than compensate for a small decrease on the Rakh and Mián Ali Branches.

Camel service grants.

244. Allotments subject to special conditions have been made to camel-owners, chiefly Baloches, under a scheme which provides for the maintenance of a number of camels to be made available for Government transport purposes. A feature of the scheme, designed to secure that the tenant shall always in the future be in a position to fulfil the service conditions as to supply of camels, is the introduction of a primogeniture clause in the Statement of Conditions. The scheme has recently been put to a test. On the 3rd of December 1901 the Transport Officer received orders to despatch one of the Camel Corps to Darya Khan for the Mahsúd Blockade. By the 20th of the same month a whole Camel Corps was entrained and despatched, the great majority of the camels having arrived in Lyallpur long before their period of 14 days notice had elapsed. Some of the grantees were at first inclined to be troublesome, but after one headman had been degraded no further obstruction was offered, and they appeared extremely pleased with their pay and equipment. The camels were a fine lot and the precentage of camels which had to be cast for unfitness was very small.

Post Office statistics.

245. As an indication of the progress of the colony the postal statistics for the year 1901-02 are instructive. The number of postal articles increased from 2,053,116 to 2,626,931, or 28 per cent. as compared with the previous year, and there were 190 post offices in the colony as compared with 113 in the year 1900-01.

SIND-SAGAR DOAB.

Punjab Act I of 1902.

246. During the year the Act known as the Sind-Ságar Colonization Act was passed into law as Punjab Act I of 1902. The purpose of this Act is fully described in the Statement of Objects and Reasons, extracts from which are reproduced in the following paragraphs:—

Present barren condition of tract.

"There is a large tract of land known as the *Sind-Ságar Doáb*, lying between the Rivers Indus and Chenab, and, higher up, between the River Indus and the River Jhelum, which is, at present, to all intents and purposes, a barren waste. It is believed that it is feasible to irrigate this tract from a permanent flow canal taken out of the River Indus, and that the carrying out of such a project would result in throwing some two millions of acres or more of what is now useless or poor grazing land open to cultivation and colonization. Having regard to the experience gained in the case of the Chenab Canal, the Local Government is prepared to favour such a project as reclaiming and colonizing the waste lands of the *Sind-Ságar Doáb*.

Canal would be costly.

"The construction of a canal from the Indus through this tract would, however, be a very costly undertaking, and unless the land can be acquired without heavy outlay, the project must be altogether abandoned on the score of expense.

Present ownership of land.

"The proprietary bodies of numerous villages have been recognised at Settlement as having rights in extensive portions of the waste lands of the *Sind-Ságar Doáb*, and there also exist rights of pasturage, melon cultivation and the like over the same waste, which are exercised by certain non-proprietors.

Compulsory acquisition by Government undesirable.

"It would not be possible to take up the land under the Land Acquisition Act, 1894, as that course would involve an enormous outlay in compensation, for, although the land is practically worthless at the present time, the mere fact that the Government desire to acquire it would give it a fictitious value in the eyes of those who have proprietary or other rights in it, and, as against the Government, they would probably be awarded compensation at a rate which, having regard to the large extent of country involved, would mount up to a sum which would probably be quite prohibitive. Moreover, to decide on taking up the land for public purposes would be to pledge the Government, in advance, to the construction of the canal—a project so costly that it may not be constructed for many years to come, if at all.

Government ownership is indispensable.

"On the other hand, the Government would not be prepared to entertain the project at all, unless it could secure an absolute title in the land served by the canal, or the greater portion of it, so as to be able to throw it open to colonization.

Proposed conditions for voluntary surrender.

"The persons possessing rights in the tract affected are fully alive to the advantages of having a canal brought through it. The value of the entire tract would thereby be enormously increased. Large numbers of land-owners and right-holders have already come forward and consented to surrender their rights in the waste lands in question to the Government on the conditions—

(1) that such surrender shall not take complete effect unless and until the project for constructing a canal through the *Doáb* is determined on;

(2) that, upon the completion of the canal, they shall be given back rights in the land to the extent of one-fourth of the area in which their rights originally existed, and in which a clear title has been secured to the Government.

"If the bulk of the land-owners and right-holders in the area which it is proposed to reclaim and colonise consent to the arrangement proposed, then the Government may, very possibly, be prepared to undertake the project of constructing a permanent flow canal from the Indus through the *Doáb*.

Necessity for legislation.

"Before the Government can take the scheme into consideration, it must be guaranteed a clear and absolute title in all lands surrendered under the agreements entered into. Unless this is done by legislation, every agreement executed may give rise to a crop of litigation which would be an intolerable burden and expense to all parties, and would add largely to the cost of the project, while hampering its execution. It is accordingly proposed to pass the present Bill."

Wards Estates.

Number of estates.

247. The latest published departmental report being that for the year ending 30th September 1901, the following figures, showing the extent to which the Court of Wards assumes jurisdiction over private estates, include six estates within the North-West Frontier Province:—

1	2	3	4	5	6	7
Year.	Number of estates.	Number with gross income of Rs. 20,000 and over.	Number with gross income of Rs. 10,000 to Rs. 20,000.	Number with gross income of Rs. 5,000 to Rs. 10,000.	Number with gross income of Rs. 1,000 to Rs. 5,000.	Number with gross income under Rs. 1,000.
1897-98 ...	70	10	10	10	30	10
1898-99 ...	66	10	9	14	25	8
1899-1900 ...	59	8	9	10	25	7
1900-01 ...	50	12	7	9	20	2

Of the estates now under consideration 35 are those of minors taken over under Section 35 (*b*) of Act IV of 1872, 10 belong to persons of full age who have

been declared, at their own request, incapable of managing their estates, whilst 2 are the properties of widows and 2 of individuals physically incapable.

Reduction in number of petty estates under management.

248. It will be seen from the table in the foregoing paragraph that the gradual reduction in the number of estates under management does not extend to the more important properties, but only to those with incomes under Rs. 20,000. Now that Act VIII of 1890 provides a suitable procedure for the appointment of private persons as guardians to minors, and that protection against permanent expropriation of landed interest is provided by the Land Alienation Act, there is less necessity for official interference with the management of private property.

General features.

249. As regards the principal estates under management the following particulars may be noticed :—

The Sher Shah Estate in Mooltan, the property of Makhdúm Shah Ali Muhammad and his two minor sons, was taken over at the Makhdúm's request on 19th December 1900. It is heavily involved, but can furnish good security, and negotiations are on foot for a loan of 1½ lakhs, to be furnished by the Mamdot Estate, which has a large balance to invest, and which the Commissioner, Jullundur, thinks might, in the interests of the Mamdot ward, be lent out in this manner. Some of the outlying land of the Sher Shah Estate has also been sold, and it is hoped that by next year satisfactory progress will have been made. The estate of the late Rája Harbans Singh is also heavily involved, but a loan of Rs. 5,64,000, with which all the existing debts will be paid off, has been arranged at 6 per cent. with the Alliance Bank of Simla. The loan will be repaid in annual instalments of Rs. 75,000 each, and the prospect of saving the estate is quite hopeful. Of the other estates it will be enough to say generally that 20 are involved more or less heavily, whilst 28 are in a sound financial position.

Education.

250. Twenty-four of the wards are receiving education at the Aitchison Chiefs' College, Lahore.

Revenue and Rent paying Classes.

Cultivating occupancy.

251. In the section of the last chapter describing land tenures will be found a table showing the distribution of the land between owners and the various classes of tenants. The proportion of the cultivated area occupied by self-cultivating owners has fallen from 46·3 to 44·4 per cent. during the decade. This result is to some extent due to the expansion of cultivation within the Chenab Colony where the land is largely held on tenancy from Government, but the transfer of land to non-agriculturists also influences the statistics. Transfers during the year ending 30th September 1901 have been already noticed under the heading "Land Records" in this chapter.

Rent statistics of the year.

252. As regards tenants-at-will kind rents seem to be growing in popularity at the expense of cash rents. The percentage in the former case has risen from 65·9 to 66·1, while as regards the latter it has decreased from 22·8 to 21·6. An increase of 1 per cent. has also occurred in the area paying at revenue rates with or without *málikána*. The most striking feature of the returns as to rents in kind is the steady contraction of the area under *zabti* rents, that is, cash rents varying according to the nature of crops grown. This is now represented by 0·3 per cent. on irrigated and 0·6 per cent. on unirrigated land. Speaking generally, rents appear to be rising, but this is probably due to improved irrigation in certain tracts, and is no guide to local rents.

Enhancement of rent.

253. The tendency to decline in the number of suits for enhancement of rent, which was noticed in last year's report, has continued; the number instituted being 290 as against 329 in the previous year, and at the same time the percentage of successful suits has fallen from 76 to 57. Gurgaon, Jullundur, Amritsar and Siálkot show considerable increases, while in Hoshiárpur there is a great falling off. In Gurgaon the increase is mainly nominal, 20 of the 33 cases coming from a single village. The Deputy Commissioner reports that there

appears to be a general rise in rents since settlement, especially in and near the tract to which canal irrigation has lately been extended. This would no doubt account for the increase in the number of suits.

No explanation is given of the increases in the other districts mentioned above. The decrease in Hoshiárpur (70 to 24) is said to be largely due to the number in the previous year having been specially inflated by the institution of 28 suits from a single village, a further reason for the present decrease being the spread of plague in the district. In this district rents, especially on well lands, seem to show a decided upward tendency, except in Garhshankar, where there is a drop which has not been explained, but is no doubt due to the influence of plague. In Ambala the Deputy Commissioner reports a general rise in rents paid by tenants-at-will since settlement, except in Tahsíl Naráingarh. The increase is naturally most marked in the case of irrigated land, but in the case of *bárání* land in the Ambala Tahsíl the increase appears, if the figures are to be trusted, to have been quite phenomenal, *i.e.*, from Rs. 4-11-0 per acre at settlement to Rs. 6-2-0. Produce rents have generally remained unchanged. In Amrirsar also it is noted that there has been a steady increase since 1895-96 in the area held by tenants paying rents in kind. In Gujránwála the effect of the Chenab Colony on rents is noticed, as cash rents paid by tenants-at-will on irrigated land are said to have considerably increased, while there has been a corresponding decrease in the case of well lands. In the case of other districts in which it may be supposed that a similar process is going on the subject has not been touched on.

Electment of tenants.

254. There were only 31 cases of ejectment of occupancy tenants actually carried out. The figures are insignificant. In the case of tenants-at-will a reaction after the famine is apparent, though not strongly marked, and some special causes making for increase appear to have been at work. In many districts, *e.g.*, Ambala, Hoshiárpur, Mooltan and Gujrát, mortgagees appear to have been making strenuous efforts to get possession of their lands from mortgagors, especially in cases where, though the mortgage had been executed with possession, the mortgagor had been allowed to keep the land on lease. The reason for this appears to have been the fear lest after the coming into force of the Punjab Alienation of Land Act they would have had difficulties in getting their hands on the land. In Jhelum, the increase is said to be due to settlement, whereas in Dera Gházi Khan the cause appears to be that population is increasing, involving more competition for land, while landlords are getting to know the provisions of the law as affording them an easy means of getting better-paying tenants. The Deputy Commissioner of Ludhiána remarks that he has noticed a tendency to use Section 447 of the Indian Penal Code (criminal trespass) as a simpler way of getting rid of a tenant than the ordinary procedure under the Tenancy Act.

Transfer of tenants' rights.

255. The general opinion of District Officers is that, as a rule, the people are not acquainted with the law as to transfer of tenants' rights. Where the landlords do know the law, and institute suits to contest the legality of a transfer, the Deputy Commissioner of Ambala says they generally succeed. A decrease in Hoshiárpur in the number of transfers is attributed in the first place to good harvests, and secondly to the idea that the Alienation of Land Act places restrictions on such transfers, though as a matter of fact the Act does not affect tenants' rights.

Land revenue assignees.

256. The total amount of land revenue assigned in the Province, including the North-West Frontier districts, was Rs. 30,33,151 as compared with Rs 29,86,924 in 1900. The increase is most marked in the Deraját Division, and is to be attributed partly to the revision of the *tumandári* allowances in the Dera Gházi Khan, and partly to the large amount of fluctuating land revenue realised on behalf of assignees in the Dera Ismail Khan District. The provisions of the Punjab Descent of Jágírs Act have been referred to in the Land Tenures section of the last chapter. Action is now being taken under this enactment to prevent the sub-division of jágír tenures.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports:—

Police.—Report on the Police Administration in the Punjab for the year ending 31st December 1901.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1901.

Prisons.—Report on the Administration of the Jails in the Punjab, 1901.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1901.

Registration.—Report on the Administration of the Registration Department of the Punjab for the years 1899-1900, 1900-01 and 1901-02.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1901-02.

And in the following Tables of the 1902 Volume of Judicial and Administrative Statistics of British India, *viz*, Police (Tables VII), Criminal Justice (Tables IV), Prisons (Tables V), Civil Justice (Tables III), Registration (Tables IX) and Municipal Administration (Tables XVII)].

LEGISLATING AUTHORITY.

Sources of legislation.

257. There are four legislative bodies from which emanate laws applicable to the Punjab. They are—

I.—The Imperial Parliament.

II.—The Legislative Council of the Governor-General of India.

III.—The Governor-General in Council.

IV.—The Council of the Lieutenant-Governor of the Punjab.

Authority for Indian Acts.

258. The legislative powers of the Supreme and Provincial Councils are regulated by the Statutes of the Imperial Parliament. The Statutes under which the authorities referred to under Nos. II and IV in the above list are constituted are 24 and 25 Vic., Cap. 67, and the amending Act 55 and 56 Vic., Cap. 14, which may be cited together as the Indian Councils Acts, 1861 and 1892.

Authority for Frontier Regulations.

259. Under the Statute 33 Vic., Cap. 3, the Governor-General in Executive Council may make regulations having the force of law for territories to which the provisions of Section 1 of that Statute have been extended. The tracts for which regulations have been made in accordance with this Statute are the districts of Hazára, Pesháwar, Kohát, Bannu, Dera Ismail Khan and Dera Gházi Khan, and the *pargana* of Spiti, a remote region in the Himalayas. Of the six frontier districts mentioned, one whole one, Dera Gházi Khan, and the larger portions of two others, Bannu and Dera Ismail Khan, are still in the Punjab. The procedure laid down by the Statute of 1870 assigns the initiative in such legislation to the Lieutenant-Governor, who proposes to the Governor-General in Council the draft of each Regulation with the reasons for proposing the same. When the draft has received the assent of the Governor-General in Council and has been duly published in the Gazettes it has the like force of law as if it had been made by the Legislative Council of the Governor-General.

Punjab Provincial Council.

260. A local legislature for the Punjab was created under Section 44 of the Act of 1861 by Proclamation in the *Gazette of India* dated 9th April 1897. The Proclamation runs as follows:—

"The Governor-General in Council is pleased to extend to the territories known as the Punjab the provisions of the Indian Councils Act, 1861 (24 and 25 Vict, Cap. 67), touching the making of laws and regulations for the peace and good government of the Presidencies of Fort St. George and Bombay, and further to specify the first day of May 1897 as the period at which the said provisions shall take effect, and nine as the number of Councillors whom the Lieutenant-Governor may nominate for his assistance in making laws and regulations."

First nominated Members of Punjab Council.

261. By a Notification of the Punjab Government in the Home Department, No. 1062, dated 12th October 1897, the following were, with the sanction of His Excellency the Governor-General in Council, nominated as the first Members of the Punjab Legislature:—

Mr. C. M. Rivaz, C.S.I., Financial Commissioner of the Punjab.

Bedi Khem Singh, C.I.E.

Mr. S. S. Thorburn, I.C.S., Commissioner, Ráwalpindi Division.

Nawáb Fatteh Ali Khán, Kazilbásh.

Mr. L. W. Dane, I.C.S., F.R.G.S., Officiating Chief Secretary to Government, Punjab.

Sir William Rattigan, Kt., Q.C.

Khán Bahádur Khalífa Saiyid Muhammad Husain, Mushír-ul-Daula, Mumtáz-ul-Mulk.

Mr. J. S. Beresford, M.E., M.I.C.E., Secretary to Government, Punjab, Irrigation Department.

Rái Madan Gopál, M.A., Barrister-at-Law.

By a Notification No. 1063 of the same date the first day of November 1897 was fixed as the date of the first meeting, and under Notification No. 1064 of the same date rules for the conduct of business at meetings of the Council were published.

The nine Members of Council have from time to time changed. The present constitution of the Council is noted in para 268. In the six years of the Council's existence no less than four Members have died,—The Hon'ble Nawáb Muhammad Hayát Khán, The Hon'ble Sardár Bhagat Singh, The Hon'ble Rája Pandit Suraj Kaul and the Hon'ble Mr. R. Clarke.

Powers of Punjab Council.

262. The legislative powers of the Punjab Council are exercised subject to the control of the Governor-General in Council, to whom all Bills included under the provisions of Section 43 of the Indian Councils Act, 1861, or containing penal clauses, are submitted for previous sanction, and to whom also every project of law is forwarded for transmission to the Secretary of State before it is introduced into Council. Before any measure, carried through the Council, can become law, it must receive the assent of the Lieutenant-Governor and of the Governor-General in Council. Rules under the Indian Councils Act of 1892 authorizing the discussion in Council of the Annual Financial Statement of the Local Government, and the asking of questions on matters of public interest, have not yet been made for the Punjab Legislature, nor have regulations, as in other Provinces, been made providing for the nomination of non-official Members on the recommendation of public associations, municipal and other bodies.

Course of Legislation.

Supreme Legislative Council.

263. None of the enactments applicable to British India which were passed by the Supreme Legislative Council during the year specially concerned the Punjab.

Frontier Crimes Regulation.

264. By the Council of the Governor-General, however, a Regulation, No. III of 1901, was passed, repealing the Frontier Crimes Regulation of 1887, and substituting therefor a revised enactment embodying all the amendments suggested by fourteen years' experience in working that Regulation.

Meetings of Punjab Council.

265. During the year three meetings of the Punjab Legislative Council took place, namely—

Place.	*Date.*
Simla	7th October 1901.
Lahore	17th January 1902.
Do.	28th February 1902.

Bills.

266. The following Bills were introduced in the Council during the year :—

(1) A Bill to provide for the periodical enumeration and registration of animals in the Punjab fit or ordinarily used for the purposes of military transport and for the compulsory acquisition of such animals in time of war and for impressment of the same for hire for purposes of military transport at any time.

(2) A Bill to provide for the inspection of Steam-Boilers and Prime-Movers attached thereto in the Punjab.

(3) A Bill to amend the Law relating to Pre-emption in force in the Punjab.

Acts.

267. The following Acts passed by the Council during the year received the assent of the Governor-General :—

No.	Title.	Date when received assent.
1 of 1902	Sind-Ságar Doáb Colonization Act ...	7th January 1902.
2 of 1902	Punjab Steam-Boilers and Prime-Movers Act ...	27th March 1902.

Membership.

268. At the beginning of the year under report the following were Members of the Punjab Legislative Council :—

The Hon'ble Nawáb Sir Amír-ud-dín Ahmad Khán of Loháru.
The Hon'ble Sardár Bhagat Singh, C.I.E.
The Hon'ble Nawáb Muhammad Hyát Khán, C.S.I.
The Hon'ble Sir A. F. D. Cunningham, K.C.I.E., C.S.
The Hon'ble Mr. J. Wilson, C.S.I., C.S.
The Hon'ble Mr. C. L. Tupper, C.S.I., C.S.
The Hon'ble Mr. J. M. Douie, C. S.
The Hon'ble Rája Pandit Súraj Kaul, Rái Bahádur, C.I.E.
The Hon'ble Mr. H. C. Fanshawe, C.S.I., C.S.

The following changes amongst the Hon'ble Members took place during the year :—

The Hon'ble Nawáb Muhammad Hyát Khán, the Hon'ble Sardár Bhagat Singh, the Hon'ble Rája Pandit Súraj Kaul, and the Hon'ble Mr. R. Clarke, died.

The seats of the Hon'ble Nawáb Sir Amír-ud-dín Ahmad Khán of Loháru and the Hon'ble Mr. J. Wilson became vacant owing to the expiry of their term of office.

The seats of the Hon'ble Sir A. F. D. Cunningham and the Hon'ble Mr. Preston fell vacant on their proceeding out of India on furlough.

The Hon'ble Mr. H. C. Fanshawe resigned his seat.

The following new appointments were made to fill vacancies:—

Nawáb Sir Imám Bakhsh Khán, K.C.I.E., Mazári, of the Dera Gházi Khan District.

Kanwar Sir Harnám Singh, K.C.I.E.

Mr. D. P. Masson, C.I.E.

The Hon'ble Mr. J. Wilson was re-appointed.

RULES HAVING THE FORCE OF LAW.

Rules made by Local Government.

269. The following Rules and Regulations having the force of law were issued during the year under report by the Local Government under authority conferred by the various Acts of the Legislature specified:—

Rules under Section 19 of Act XIII of 1880 for the regulation of vaccine operations in the Municipality of Gujrát.

Rules under Section 4, clause (1), and Section 10 of the Agriculturists Loans Act (XII of 1884) for loans to be made to owners and occupiers of land for the relief of distress and the purchase of cattle and seed, &c., &c.

Rules under Section 25 of Act XIII of 1890 (The Punjab Alienation of Land Act) for giving effect to the provisions of Section 17 of the said Act.

Regulations under sub-section (1) and sub-clause (*b*) of sub-section 2 of Section 2 of the Epidemic Diseases Act, 1897.

Rules under Section 9 of the Indian Petroleum Act, VIII of 1899, to regulate the possession, sale and transport of carbide of calcium in the Punjab.

Rules under Section 3 of the Hackney Carriages Act, XIV of 1879, for the regulation and control of Hackney Carriages in the Ráwalpind Municipality.

Revised Rules under Section 55 (2) of the District Boards Act, XX of 1883.

Rules under Section 6 (2) and Section 184 (1) (*b*) of the Punjab Municipal Act, XX of 1891, for the election of members for the Bahádurgarh Municipal Committee, Rohtak District.

Rules under Section 55 of Act XX of 1883 (The District Boards Act) for the District Board of Lahore.

Revised Rules under Section 184 (*g*) of Act XX of 1891 (The Punjab Municipal Act) for regulating elections in the Delhi Municipality.

Rules under Section 9 of the Petroleum Act (VIII of 1899) to regulate the possession and transport of Petroleum in the Punjab.

Rules under Section 55, clauses (*d*) and (*g*), of the District Boards Act, XX of 1883, for the constitution of a District Board in the Miánwáli District.

Police.

Sanctioned strength.

270. The sanctioned strength of all bodies of Police organized under Act V of 1861 duting 1901 was as follows :—

Inspector-General of Police	1
Deputy Inspectors-General of Police	2
District Superintendents of Police (including Assistant Inspector-General, Railway Police, and Assistant to Inspector-General, Police)	31
Assistant District Superintendents of Police (including Deputy Superintendent of Railway Police)	22
Probationary Assistant Superintendents of Police	5
Inspectors	67
Deputy Inspectors and Platform Sergeants	569
Sergeants	2,358
Constables	14,827

Nationality and Religion of Police.

271. The nationality of the force on the 1st January 1902 was—Europeans 80, Eurasians 11, Natives 14,545. Classified according to religion there were—

Castes.	Officers.	Men.
Christians	96	4
Muhammadans	1,639	9,116
Sikhs	363	1,472
Hindús (Brahmans, Rájpúts, Gurkhas)	369	2 024
Hindús of all other castes	532	1,929
Total	2,999	14 454

Cost of Police.

272. The estimated cost of the force was Rs. 34,67,663, of which Rs. 27,08,249 were debitable against Imperial or Provincial Revenues and the balance against Municipal Funds and other sources.

Classification of cases investigated.

273. During the year 1901, 46,593 cases were reported to the Police. Of this number 436 were not investigated, as they were held to be untrue. Fifty-four cases were investigated under Magistrate's order after investigation had been at first refused. Considered according to classes the following results are obtained :—

Class.	Offences.	1900.	1901.
I	Offences against the State, public tranquillity, safety and justice.	1,047	746
II	Serious offences against the person	5,219	4,069
III	Serious offences against the person or property or against property only.	17,530	11,032
IV	Minor offences against the person	126	126
V	Minor offences against property	19,007	14,223
	Total of Classes I to V	42,929	30,196
VI	Other offences	19,051	16,397
	GRAND TOTAL	61,980	46,593

Working of Police.

274. The following figures show the efficacy of the Police working during the past four years in regard to offences included in Classes I to V:—

1	2	3	4	5	6	7	8
Year.	Investigated cases regarded by the Police as true.	Cases in which investigation failed.	Completed trials of investigated cases.	Investigated cases declared by Courts false, mistaken or non cognizable.	Trials ending in acquittal or discharge.	Trials ending in convictions.	Percentage of convictions to trials.
1898	31,138	14077	16,031	908	4,051	11,072	69
1899	34,756	15,626	17,676	1,189	4,329	12,158	6·87
1900	38,211	16,196	20,946	1,225	4,616	15,105	72
1901	26,154	11,479	13,792	896	3,190	9,706	70

Equipment.

275. The armament of the force was as follows:—

Men armed with	Fire-arms	7,773
	Swords and Batons	9,933
	Batons only	41

Discipline.

276. The subjoined figures show the number of departmental and judicial punishments inflicted on the force during the last three years:—

	1899.	1900.	1901.
Departmental punishments (excluding dismissals) ...	2,036	1,884	1,425
Judicial ditto ditto	117	158	101
Total	2,153	2,042	1,526

Education.

277. Two thousand four hundred and seventy-one officers, including Sergeants and 3,410 Constables, can read and write.

RURAL POLICE.

Village Chaukidars.

278. The Departmental Police Report does not contain much information as to the working of this agency, but the Government of India having expressed a wish that some account should be given of the operations of the rural police the subject will receive more notice in future reports. Meanwhile the following facts concerning the origin, organization and position of this body may be of interest:—

Originally a menial servant of the village community, the village watchman, was paid out of the common funds in kind or in cash. This placed him in complete dependence on the headmen as representatives of the village, and this relation was legalized by the rules under the Punjab Laws Act, but the

actual appointment or dismissal of the watchman was vested in the Deputy Commissioner. Still, as a matter of fact, the headmen retained in practice, through immemorial usage, much of their former powers, so much so that the first half-year's salary is often paid them by the *chaukídár* as the first fruits of his office.

In 1893 the increasing difficulties of obtaining men for the post led to enquiry. It was found that the maximum pay, Rs. 3 per mensem, paid half-yearly, was inadequate, and that even so it was not always paid regularly. Power was taken to secure regular payment and the maximum salary raised to Rs. 5 per mensem instead to Rs. 3.

These measures will doubtless in time improve the status of the village watchman, but under the old system he was essentially a menial, generally of a low caste, almost always illiterate, and often of doubtful character. The lowness of the pay compelled him to work or cultivate land to eke out a living, and his association with criminals was often alleged.

It has frequently been proposed by Police Officers that village *chaukídárs* should be put more under the Police and made independent of the village headmen, but the best administrative officers have always opposed this suggestion. To adopt it would be to strike at the root of the principle of village responsibility. The *chaukídár* is the servant of the headmen and should remain so. The headmen are the representatives of the community and should be made to do their duty and to see that the *chaukídárs* do theirs. To enforce the responsibility in the first instance of the headmen and of the *inámdárs* also is the proper policy to adopt.

CRIMINAL TRIBES.

Castes. 279. The tribes subject to Act XXVII of 1871 are the Mínás, Tágús, Bilúchís, Harnís, Sánsís, Bauriahs, Pakhíwárs, Mahtams, Bhats and Giloi Bilúchís.

Minas. 280. The number of Mínás on the register of the Gurgaon District was 374, of whom 53 were absent on the 31st December 1901 without passes. Four offences other than offences against the rules made under the Act were committed by Mínás during the year.

Tagus. 281. The number of names on the register of the Karnál District at the close of the year was 228. Three members of the tribe were convicted during the year 1901 of offences under the Indian Penal Code. Seventy-eight Tágús were shown as absent without passes.

Biluchis. 282. In the Karnál District 52 convictions were obtained against members of this tribe under the Criminal Tribes Act. On the 31st December 1901 403 names were on the Karnál Register and 17 on that of Ambala. From the former district 135 Bilúchís were absent without leave and from the latter only 1.

Harnis. 283. The following table shows the districts in which this tribe is registered and the operations under the Act:—

Districts.	Number of persons on the register.				Offences committed in 1901.		Number of persons absent without leave.
	End of 1900.		*End of* 1901.				
	Males.	Females.	Males.	Females.	Under Criminal Tribes Act.	Under other laws.	
Ludhiána	832	139	893	143	69	1	304
Jullundur	51	39	52	42	...	...	7
Hoshiárpur	210	200	225	225	11	...	38

Sansis.

284. The following table gives an abstract of the operations of the Act in the districts in which this tribe is registered:—

Districts.	Number of persons on the register.				Offences committed in 1901.		Number of persons absent without leave.
	End of 1900.		*End of* 1901.				
	Males.	Females.	Males.	Females.	Under Criminal Tribes Act.	Under other laws.	
Karnal	84	32	84	32	1	...	38
Ludhiána	332	2	344	2	26	4	10
Jullundur	273	...	275	...	64	7	2
Hoshiárpur	81	...	85	...	1	...	1
Lahore	78	...	70	...	...	...	10
Gurdáspur	489	254	532	310	17	10	61
Siálkot	492	...	417	...	25	9	170
Gujránwála	1,206	...	1,190	...	48	15	6

Bauriahs.

285. In the Ludhiána District 4 convictions were obtained against members of the tribe under the Criminal Tribes Act. There were 117 persons on the register at the end of the year.

Pakhiwars.

286. The number of Pakhíwárs on the register of the Siálkot District at the close of the year was 319. Forty-six offences under the Criminal Tribes Act and 15 under other laws were committed during the year. Ninety-two members of this tribe were reported absent without leave on the 31st December 1901.

Mahtams.

287. The number of Mahtams on the register in the Lahore District at the close of the year was 46 against 53 in the previous year. Seven names were removed from the register during the year for mistaken entry. None were absent without leave on the 31st December 1901.

Bhats.

288. One hundred and eight men of the tribe of the Siálkot District were on the register at the end of the year. Two persons were convicted under the provisions of the Act and 23 were absent without leave at the close of the year.

Giloi Biluchis.

289. The number of names on the register of the Jhang District on the 31st December 1901 was 76, of whom 9 are absent without passes. Seventeen convictions under the provisions of the Act and 4 under other laws were obtained against them.

Criminal Justice.

General review of offences committed and brought to trial.

290. The number of offences reported during the year was 158,287, of which 110,514 were returned as true. The population of the Punjab as now constituted, according to the Census of 1901, is 20,330,339, and there were therefore 5 offences returned as true for every thousand persons, or 1 less than in 1900. Ninety-one thousand eight hundred and seven cases, involving 207,771 persons, were brought to trial. There was a satisfactory abatement in serious crime in the year 1901. There was a considerable decrease, *viz.*, 4,781, as compared with the figures for the previous year, in the number of cases under the Indian Penal Code which were admitted to have occurred in 1901 in the districts (excluding Miánwáli, which was newly formed in the year under report) now comprised in the Punjab. In making this calculation the figures for districts of the North-West Frontier Province have been excluded from the returns for 1900.

Offences classified.

291. Seventy-six per cent. of offences reported and 65 per cent. (or 78,317) of offences returned as true were under the Indian Penal Code. Excluding from the returns for 1900 the number of offences committed in the Pesháwar, Kohát, Hazára, Bannu and Dera Ismail Khan Districts and from the figures for 1901 the number of offences committed in the Miánwáli District which is composed of portions of the old Dera Ismail Khan and Bannu Districts, it appears that the number of offences affecting life which were admitted to have occurred in the 26 districts of the Punjab (excluding Miánwáli) during the year 1901 is a little greater than the similar number in the previous year, the figures being 861 and 846, respectively: murder cases, alone, however, fell from 438 in 1900 to 389 in the year under report, theft cases from 12,147 to 10,362, offences of receiving stolen property from 2,810 to 2,274, and robbery and dakaiti cases from 714 to 418.

Percentage of convictions.

292. The fall from 33 to 28 in the percentage of persons convicted to those tried during the year is to be regretted, especially in view of the fact that the number of cases dismissed *in limine* rose by 3 per cent. The steady tendency to decrease which this percentage has shown since 1892 and which unfortunately has been more than maintained in the year under report is, no doubt, in some measure due to the increase in the number of cases compromised. The percentage of persons discharged in consequence of the non-attendance of the complainant or the withdrawal of the complaint to the total number of persons under trial rose from 27 in 1900 to 30 in the year under report. But excluding cases so compromised, the percentage of convictions of persons for the year 1901 is only 40 as against an average of 50 for the previous seven years, and this decrease is equally noticeable both in the case of convictions for offences under the Indian Penal Code and in the case of convictions under Special and Local Laws. The decrease is also maintained even if petty cases such as simple cases of assault, theft, criminal trespass and offences under Special and Local Laws are excluded from consideration.

Local and Special Laws.

293. Thirty-two thousand one hundred and ninety-seven cases were admitted under Local and Special Laws, and 34,253 persons convicted. Under the Arms Act 343 offences were admitted, and 284 persons were convicted, as against 787 offences and 555 persons, respectively, in the previous year.

Security for good behaviour.

294. Four thousand and thirty persons were called upon to give security for good behaviour as against 6,055 in the previous year. The average amount of security demanded was Rs. 179. Out of 216 persons released upon probation under Section 562 of the Criminal Procedure Code, only 26 were subsequently dealt with under Section 563.

Agency by which criminal work was disposed of.

295. District Magistrates, including Additional District Magistrates, disposed of 2,361 cases as against 6,009 last year and 4,206 in 1899. They tried 55 European British subjects, of whom 25 were convicted, 27 acquitted, 1 committed to the Sessions Court and 1 to the Chief Court, while 1 case was still pending at the close of the year. Honorary Magistrates have disposed of a large number of cases. Disposals in Sessions trials fell from 659 to 385, the decrease being partially due to the separation of the Frontier. The number in Lahore, which rose from 43 in 1899 to 75 in 1900, fell to 27 in the year under review. Similarly, in Ráwalpindi the number fell from 102 to 55, having been as low as 45 in the year 1899.

Punishments.

296. The Chief Court confirmed the sentence of death upon 102 persons, commuted it in the case of 13 persons, and acquitted 20 persons sent up under Section 374, Criminal Procedure Code. The number of persons sentenced to solitary confinement fell from 12,675 in 1900 to 7,931, and the number of persons whipped, from 4,642 to 2,560. The decrease in the case of whipping is due, no doubt, to the cessation of famine conditions and the consequent decrease in petty thieving. Forfeiture of property was ordered in 24 cases only, as against 139 in the previous year.

Appeal and revision.

297. Of 59,275 persons convicted, 16,170, or 27 per cent., appealed—8,845 to the District Magistrate, 6,528 to the Sessions Judge, and 797 to the

Chief Court. Twenty-four per cent. of these appeals were summarily rejected, 38 per cent. dismissed after notice, and in the case of 38 per cent. sentences were reduced, altered or set aside, or proceedings quashed. Including applications for revision 40 per cent. of the persons convicted resorted to the appellate Courts and were successful to the extent of 32·5 per cent. The average duration of appeals was 12 days.

The Chief Court.

298. The single case which came before the Chief Court in the exercise of its original criminal jurisdiction resulted in an acquittal. The evidence was conflicting, and the jury unanimously found the prisoner not guilty. The number of European British subjects in the Province is large, and the fact that only one case was committed to the Chief Court is evidence of their abstention from serious crime. The number of appeals instituted fell from 1,113 to 797, disposals from 1,039 to 855 and the pending file from 221 to 163. Revisions fell from 1,810 to 1,606, disposals from 1,654 to 1,404, while the pending file rose from 156 to 202.

Prisons.

Number of Jails.

299. The inauguration of the North-West Frontier Province on the 9th November 1901 caused the transfer of the District Jails at Pesháwar, Kohát Abbott-abad, Dera Ismail Khan and Bannu and the Lock-ups at Mardán and Teri from the Punjab, in which there thus remained 28 Jails (4 Central and 24 District).

Jail population.

300. The total number of prisoners of all classes admitted into the jails and 19 of the larger Judicial Lock-ups during the year, including transfers, was 48,203 (convicts 27,697, under-trials 20,124 and civil 382) as compared with 61,195 (convicts 34,588, under-trials 26,226 and civil 381) in the previous year, being a decrease of 12,992, *viz.*, convicts 6,891, under-trials 6,102, and an increase of 1 civil prisoner. Notwithstanding the large decrease in admissions, the daily average population was 13,816 (convicts 12,712, under-trials 1,067 and civil 37), or only 834 less than it was in 1900, a result due to the large number of prisoners in jail undergoing long sentences remaining from previous years, and to the heavier sentences passed on those admitted during the year.

Accommodation in Jails.

301. The existing accommodation in the jails of the Punjab (exclusive of hospital accommodation) is sufficient for only 12,994 males and 704 females, and as the daily average number of males in confinement was in excess of the accommodation, overcrowding was inevitable. Relief was afforded by the use of tents; the camp at Montgomery was retained throughout the year and the camps at Mung Rasúl and Mooltan during a portion of the year.

Buildings.

302. A sum of Rs. 87,891 was expended on building operations in 1901. Of this amount, Rs. 42,215 were devoted to repairs and Rs. 45,676 to original works, including a new gateway at the entrance of the Ferozepore Jail, extensive alterations to the main entrance of the Ráwalpindi Jail, and 20 cubicles, according to the design approved by the Government of India, in the Lahore Central Jail. The jail buildings were maintained in fair order during the year; but considerable expenditure can with advantage be incurred in their improvement. A special grant has been made for improvements, as well as for the provision of increased accommodation, which is one of the most pressing needs.

Classification of convicts.

303. Excluding transfers and the convicts admitted to Lock-ups, 16,707 male and 545 female convicts were admitted into jail during the year. Of these, 22 were Christians (Europeans 7, Eurasians 3 and Natives 12), 11,548 Muhammadans, 5,678 Hindús and Sikhs, and all other classes 4, the ratio *per mille* of each denomination of the free population admitted into jail being Christians 0·33, Muhammadans 1·11, and Hindús and Sikhs 0·61.

Classified according to age, 121 convicts (114 males and 7 females) admitted were under the age of 16 years, 14,407 were from 16 to 40 years, 2,449 from 40 to 60 years, and 275 above 60 years.

Remarks regarding sentences.

304. Of the 17,252 convicts admitted into jail in 1901, 1,561 were sentenced to simple imprisonment, 8,250 to rigorous imprisonment, 7,067 to rigorous imprisonment with solitary confinement, and 374 to rigorous imprisonment with whipping. Of those shown as sentenced to rigorous imprisonment only 83 (68 males, 15 females) were admitted under sentence of transportation for life, 42 under sentence of transportation for a term, and 98 (94 males, 4 females) under sentence of death. One hundred and seventy-nine males and 11 females were transported beyond seas in 1901 against 194 (186 males, 8 females) in 1900, and 94 (93 males, 1 female) were executed during the year.

Of the convicted prisoners admitted to jail during the year, 2,782 had been previously convicted, 1,685 once, 542 twice and 555 more than twice, the ratio per cent. of admissions being 16 as compared with 14 in the previous year.

Escapes and recaptures.

305. The number of escapes increased from 6 in 1900 to 16 in 1901. Eight escaped from within jail walls and a similar number from without. Four of those who escaped during the year were recaptured, and 5 of those who escaped in the previous ten years were also recaptured, leaving 30 still at large.

Imposition of Fetters.

306. During 1901, 4,187 convicts (as compared with 4,651 in 1900) were placed in fetters for the following periods:—Under one month 1,670, one to three months 1,093, three to six months 966, six to twelve months 276, over twelve months 182. Though resorted to less frequently than in 1900, fetters were used somewhat freely in some jails to secure the safe custody of prisoners accommodated in tents to obviate overcrowding, and for quarantine purposes, in consequence of the prevalence of plague.

Discipline, Offences and Punishments.

307. The number of prison offences committed during the year was 38,074, giving a ratio of 3·01 offences per head of average population during the year as against a ratio of 2·04 per head in 1900. The increase is ascribable to differences in treatment rather than to any change for the worse in the conduct of the prisoners. One hundred and twenty-three offences were dealt with by Criminal Courts as compared with 56 in 1900. Offences relating to work rose from 15,474 in 1900 to 23,927 in 1901, the Mung Rasúl Central Jail contributing no less than 2,921 to the increase, which is mainly attributable to the nature of the work on which the prisoners were employed. Offences relating to prohibited articles rose from 2,953 in 1900 to 3,376.

The total number of minor punishments rose from 19,199 in 1900 to 27,513 in 1901, and major punishments from 7,242 to 10,452. Corporal punishment was inflicted in 168 cases as against 200 cases in 1900. In the Ráwalpindi Jail, with an average population of 646, whipping was not resorted to at all.

Education.

308. Of the 17,252 convicts admitted during the year, only 361 (360 males and 1 female) possessed any literary attainments.

Mark-system.

309. The number of prisoners released during the year under the mark-system was 4,295 as compared with 3,755 in the previous year. The longest remission—753 days—was earned by a convict under a term exceeding 10 years who was released from the Lahore Central Jail. The largest gratuity—Rs. 4-14-0—was earned by a convict released from the Siálkot Jail. The average gratuity earned was Re. 0-15-0. The mark-system exercises an excellent influence. It is coming increasingly into application, and is understood by those whom it affects.

Employment of Convicts.

310. The average number of convicts sentenced to labour in 1901 was 327 less than in 1900. Notwithstanding this, there was an increase of 81 in the number employed on manufactures, the ratios for the two years being 29 per cent. in 1900 and 31 per cent. in 1901. There was a decrease of 91 in the average number not employed for other reasons. An alteration in the regulations accounts for the larger average number of convict officers employed. There was a decrease of 61 in the number of prison servants, but the percentage employed was the same as in the previous year. The number employed on gardening and on preparing articles for prison use decreased by 49 and 93 respectively, and 64 fewer prisoners were employed on repairing jail buildings, which, owing to

scanty rainfall, did not suffer so much as in the previous year. There was a decrease of 79 in the number employed on public works ascribable to sickness among the prisoners at Múng Rasúl, causing a stoppage of transfers during a portion of the year to the jail there.

Convict Officers.

311. An average of 959 males and 11 females were employed as convict officers, being equal to a ratio per cent. of 8 and 4 respectively of the daily average population. The number of punishments awarded to convict officers was 993 against 990 in the previous year. Speaking generally, the convict officers worked well, and their services are very highly appreciated by Superintendents of Jails.

Manufactures.

312. The net cash earnings of convicts amounted to Rs. 1,24,834, being Rs. 2,542 less than the earnings of the previous year, but the average earning per convict sentenced to labour was Rs. 10-0-0 against Rs. 9-15-0 in 1900. The earnings of the prisoners in the Múng Rasúl Central Jail amounted to Rs. 63,047, and in the Lahore Central Jail to Rs. 13,535.

Excluding extra-mural employment, the industries which yielded the largest cash profit were:—Paper-making Rs. 35,959, Lithographic printing Rs. 10,848, mat-making Rs 6,006, oil-pressing Rs. 4,023, weaving cotton fabrics Rs. 2,127, and pottery Rs. 1,550. The paper made in jails has undergone some improvement, but it is still not what it ought to be. The lithographic printing now turned out in the Lahore Central Jail compares favourably with work done in private presses.

The indirect profit resulting to Government from the performance of jail duties by convicts amounted to Rs. 2,91,959 as against Rs. 3,04,185 in 1900.

Total Expenditure.

313. The gross expenditure on jails in 1901 was Rs. 8,60,049 as against Rs. 9,87,716 in 1900, or a decrease of Rs. 1,27,667, which is ascribable to a decline of 748 in the daily average population and to the lower prices of food-grains. The average cost per head was Rs. 64-1-7 as compared with Rs. 69-10-4 in 1900. Vegetables and other produce to the value of Rs. 53,225 were supplied from jail gardens for use in the dietary.

Health.

314. Although the hospital admission rate was slightly lower and the daily average sick-rate the same as in 1900, the death-rate among all classes of the jail population rose from 24·01 to 26·95, while that of the free population fell from 46·61 to 36·13. The death-rate exceeded 30 *per mille* in the case of 12 jails, but all these were small jails, with the exception of the jails at Múng Rasúl, Ambala, Ferozepore and Delhi. In Múng Rasúl, the unfortunate outbreak of an epidemic of cerebro-spinal meningitis resulted in the occurrence of 47 cases and 29 deaths. In the three other jails, the high mortality was due to the bad state of health of the prisoners on admission. On the whole, the health of the jails in the Province was satisfactory. Attention continued to be paid to the food and water used in the jails and to the personal hygiene of the prisoners and general conservancy. The systematic use of quinine as a prophylactic against fever appears to be exercising a good effect. Steps are being taken for the extermination of mosquitoes in jails. A special isolation ward in the Lahore Central Jail for the treatment of tuberculous patients has been sanctioned.

Magisterial Lock-ups.

315. The daily average number of prisoners in the larger Magisterial Lock-ups was 383 (convicts 68, under-trials 313 and civil 2). Six deaths occurred giving a death-rate of 15·67 *per mille* of average strength as against 8·53 *per mille* in 1900. One under-trial prisoner escaped. The annual cost per head of average strength was Rs. 99-6-4 as compared with Rs. 95-7-0 in 1900.

General Remarks.

316. All the Central Jails and all the District Jails, except three of the smaller ones, as well as some of the larger lock-ups, were inspected by the Inspector-General during the year. The visitation of jails by official visitors was not so frequent as in 1900. Commissioners of Divisions paid 10, Divisional Judges 4 and District Magistrates 33 fewer visits. Non-official visitors paid a greater number of visits than they did in the previous year.

Civil Justice.

Institutions.

317. The gradual decrease, since 1896, noticed last year, in the number of original suits instituted in the Civil Courts of the Punjab, came to an end in the year under report, which shows a slight increase of 4,960 institutions. This increase is, of course, more important than it appears at first sight to be, as the figures of previous years take no account of the districts which were separated from the Punjab in 1901. There was, however, a considerable decrease in suits for foreclosure, which fell from 9,857 to 7,028. The general decrease in suits of this nature is due to the Punjab Alienation of Land Act.

Classification of suits.

318. There is a remarkable increase in the number of suits brought by money-lenders against agriculturists in some districts, and a no less remarkable decrease in others. Suits to establish a right of pre-emption rose from 3,999 in 1900 to 5,528 in 1901. Suits connected with matrimonial claims fell from 2,383 in 1900 to 1,896 in 1901.

Value of Suits.

319. The total value of suits rose from Rs. 2,40,24,131 in 1900 to Rs. 3,74,73,291 in 1901, and the average value from Rs. 106-3-4 to Rs. 161-13-6. The rise in value has no real importance, being almost entirely due to the institution of a single heavy suit in Ráwalpindi, the value of which has, for statistical purposes, been estimated at nearly 1½ crores of rupees.

Disposals in Courts subordinate to the Chief Court.

320. Five original suits came before Divisional Courts, and three of them were decided. In District Courts 242,518 suits were decided out of 273,172 for disposal, leaving 30,654 pending. As compared with last year, disposals rose by 2,477 and the pending file by 2,870. On an average each District Judge and Subordinate Judge with appellate powers decided 105 cases, each Assistant Commissioner 69 cases, each Extra Assistant Commissioner 125 cases, each Tahsíldár 155 cases, each Náib Tahsíldár 83 cases, each Munsif 1,775 cases, each Judge of a Provincial Small Cause Court 1,902 cases, each Munsif with Small Cause Court powers 1,482 cases, each Judge of a Cantonment Small Cause Court 436 cases, and each Honorary Civil Judge 210 cases.

Duration of cases.

321. The average duration of contested cases was 47 days and of uncontested cases 28, showing a slight rise of 2 in each average. There has been a gradual rise since 1899, when the averages were 42 and 24 days, respectively.

Appeals in Courts under Chief Court.

322. The percentage of appeals to appealable orders fell from 25 to 24. In Divisional Courts 5,827 appeals were instituted, as against 6,713 in 1900, and the pending file fell from 2,034 to 1,905. In 56·3 per cent. of appeals the order of the lower Court was upheld. The averege duration of appeals fell from 99 to 93 days. In District Courts 6,201 appeals were instituted, as against 6,846 in 1900. In 66·5 per cent. of appeals the order of the lower Court was upheld. The pending file rose from 621 to 813, and the average duration from 37 to 38 days.

Chief Court.

323. There were instituted in the Chief Court 6 original suits, 784 appeals from decrees, and 265 appeals from orders. In 39 per cent. of the appeals the decision of the lower Court was affirmed. The average duration of appeals, which rose from 434 days in 1899 to 479 days in 1900, fell in the year under report to 447 days. Institutions fell by 226 and disposals by 318; and the pending file was reduced by 217 (from 1,745 to 1,528). The number of appeals disposed of by single Judges fell from 883 to 693.

General.

324. Notices for foreclosure showed a large decrease from 4,099 to 2,472, the inevitable result of the coming into force of Act XIII of 1900. There were 230,861 applications for execution of decrees, and of these 201,919 were disposed of. Rupees 7,08,739 were realised voluntarily, and Rs. 30,25,675 after issue of process. These figures represent a realisation of 22 per cent. on the value of money decrees in execution.

The excessive delays occurring in the disposal of civil cases in the Courts of the Punjab formed the subject of correspondence with Government during the year under report. A preliminary step towards relieving the Civil

Courts from criminal work was taken at the end of 1901, when his criminal appellate powers and powers under Section 30 of the Code of Criminal Procedure were withdrawn from the District Judge of Lahore. Changes of a more far-reaching nature have been made during the present year 1902, measures having been taken to employ exclusively on civil work the District Judges of Delhi, Ambala, Ludhiána, Jullundur, Hoshiárpur, Ferozepore, Lahore, Amritsar and Ráwalpindi.

Registration.

Period under review.

325. In the following paragraphs the term *triennium* refers to the triennial period 1899-1900 to 1901-02.

Total of documents registered.

326. The total number of documents registered was 66,183 in the year 1901-02, which is less than half of the number registered in the first year of the triennium. The average number of documents registered annually in the triennium was 108,902, while the similar figure for the preceding triennium was 149,073. This very great decline in registration business, particularly in the year 1901-02, in which year the Punjab Alienation of Land Act came into force, is entirely due to the appearance of the said Act. These results were inevitable because, not only has the Act rendered promiscuous alienations difficult, but Section 17 of it provides that no instrument which contravenes provisions of the Act shall be admitted to registration.

Total of ordinary fees.

327. The total receipts from ordinary fees were Rs. 1,29,853 in 1901-02, which figure is not much more than half of the total of receipts under this head in the first year of the triennium. The average annual receipts under this head in the triennium have been Rs. 1,91,881, while the average for the preceding triennium was Rs. 2,55,342.

Total of other receipts.

328. The totals of "other receipts" have not varied so much, which is natural, as these receipts include fines, and fees on commissions issued, fees for searches, &c., and it is only under the head "copying fees" that a decline, parallel with the decline in general registration business, might be much expected. The total (Rs. 60,748) of receipts in 1901-02 was, however, over thirty thousand less than in the first year of the triennium, and, while the average annual receipts under this head were Rs. 83,200 in the triennium under report, they were Rs. 1,04,757 in the preceding triennium.

Grand total gross receipts.

329. The grand total of gross receipts in 1901-02 was Rs. 1,90,601, compared with Rs. 3,29,937 in the first year of the triennium. The average annual figure of gross receipts in the triennium was Rs. 2,75,082, while the similar figure in the preceding triennium was Rs. 3,60,099.

Aggregate value of immoveable property transferred.

330. The recorded aggregate value of immoveable property transferred is Rs. 3,05,09,736, which is less, by nearly 170 lakhs, than the figure (Rs. 4,74,90,991) quoted in the first year of the triennium, and less, by over 218 lakhs, than the annual average of the totals quoted in the years of the triennium 1896—1899. It is not too much to say that the Alienation of Land Act has checked transfers to the value of over 200 lakhs, for the figures for the two first years of the triennium under report were affected by anticipation of the Act's appearance.

Sales and mortgages.

331. A remarkable feature of the figures in this statement is the approximation between the value of the property transferred by sale and that of the property transferred by mortgage. In the first year of the triennium the value of sales was 177 lakhs compared with 252 lakhs in the case of mortgages; in the second year the figure became 199 lakhs compared with 222 lakhs, and in the third year 127 lakhs compared with 128 lakhs. Such an approximation is, of course, an uncommon one, as the value of the temporary transfers has always in the past well exceeded that of permanent transfers. These unusual results were brought about by the Alienation of Land Act, although of course not by its actual introduction, but by the anticipation of its passing into law, for while the number of mortgages decreased owing to the prospect of their being annulled,

or amended, by the Act, the proportion of sales increased, forced on by creditors anxious to get complete rights established, which the Act, when it came into force, could not assail.

Diminished emoluments of Sub-registrars.

332. The emoluments of Non-official Sub-Registrars have been seriously affected by the causes noted above. The Inspector-General's figures indicate a decline of 40 per cent. in the aggregate of their share of fees.

Local Boards Administration.

Constitution of District Boards.

333. Local Boards were abolished in the Rohtak and Jullundur Districts, and the District Boards of these districts were reconstituted, the zail being taken as the basis of the system of electoral circles. Local Boards have now been abolished in all the districts of the Delhi Division. A District Board was formed for the new district of Miánwáli, and the Ráwalpindi District Board had to be reconstituted owing to the re-transfer of the Attock Tahsíl from Hazára to Ráwalpindi. Owing to the constitution of the North-West Frontier Province the number of District Boards in the Province now stands at 27.

Elections.

334. Elections were held in 11 out of the 17 districts in which the elective system exists. There were no elections in Gurgaon, Ambala, Kángra, Ludhiána, Amritsar and Gujrát. In Ambala a general election should have been held towards the end of the year, but prevalence of plague made it impossible to hold one. Where elections did take place, they were characterised, as a rule, by the usual apathy, only 46 seats out of 212 being contested. In Rohtak only 5 candidates came forward for 30 vacancies, and 25 places had to be filled by nomination. In Delhi and Hissar the vacancies that occurred were not contested. In Gurgaon 7 candidates were with difficulty and apparently after much pressure secured for 10 vacancies, and the election was postponed until 3 other candidates could be induced to come forward. In Ferozepore 39 vacancies occurred, of which half only were contested, and in Hoshiárpur there were only 2 contests in 36 vacancies. In Jullundur some interest seems to have been aroused, as there were 16 contests for 24 vacancies, and 37 per cent. of the voters came to the poll. In Lahore, where 10 vacancies occurred, not a single old candidate sought re-election, and the majority of the vacancies had to be filled by nomination under Section 11 (3) of the District Boards Act. A similar state of things presented itself at Gujránwála. "This", the Commissioner of Lahore remarks, "is a significant commentary on the failure of the elective system to bring about the best men. It is notorious that the best men will not stand for District Board elections, but prefer to take their chance of being nominated."

Meetings of District and Local Boards.

335. Under Rule XV of the Rules for the guidance of District and Local Boards published under Act XX of 1883 "an ordinary meeting of the District Board shall be held not less than once in every three months and of every Local Board not less than once in every two months."

The following District Boards failed to comply with this rule:—

> Rohtak (4); Ambala (3); Jullundur (4); Lahore (3); Amritsar (4); Montgomery (4); Gujránwála (4); Dera Gházi Khan (2).

In Ambala 6 meetings were called, but a quorum only appeared at 3 of these, and both in Ambala and Lahore plague interfered with the meetings of the Boards. In Dera Gházi Khan only 2 ordinary meetings were held, and the Deputy Commissioner explains that no more meetings were required owing to the small amount of business to be transacted. The average attendance at meetings was on the whole satisfactory. The Local Boards of Rohtak, Sámpla and Jhajjar of the Rohtak District, those of the Lahore District, and the Local Board of Ajnála in the Amritsar District held no meetings during the year. As above stated, these Boards have now been abolished in the Rohtak District. Nineteen out of the remaining 35 Boards failed to hold the prescribed minimum of 6 meetings. The average attendance at meetings was good.

Sub-Committees.

336. Finance Sub-Committees appear to have been appointed in all districts during the year under report except in Delhi, Jhang, Muzaffargarh and Dera Gházi Khan. Owing to the reorganisation of the District Board in the first-named district consequent on the abolition of Local Boards it was not found feasible to appoint a Finance Sub-Committee until the current year. Standing Sub-Committees for Education, Sanitation and other similar purposes exist in a few districts with fair results in most cases.

Proceedings set aside.

337. Two resolutions of the District Board of Rohtak were overruled by the Commissioner. The first was a proposal passed at the meeting held on June 6th, 1901, to grant a reward of Rs. 95 to the Local Fund Clerk in consideration of his services during the famine of 1899-1900. The second passed on August 19th related to an increase of pay which the Board proposed to give to the District Overseer. In regard to the former the Commissioner remarks that District Boards are far too prone to vote away public money in this way on mere importunity and that his predecessor had dealt fully and finally with all such claims at the close of the famine. As to the latter, the District Overseer was already in receipt of the maximum pay of the appointment, and the Commissioner observes that he has set himself against proposals of this sort which are constantly coming up. He rightly remarks that the pay of every appointment under the District Board should be fixed just as in Government service, and that proposals to increase the scale of pay on purely personal grounds should not be put forward. Two proceedings of the District Board of Ludhiána sanctioning the increase of pay of certain School Masters were similarly set aside.

Rules.

338. Consequent on the appointment of a Sanitary Engineer to Government new rules were published in Punjab Government Notification No. 1016, dated 10th August 1901. New rules were gazetted to provide for the reconstitution of the Rohtak, Lahore and Jullundur District Boards consequent on the abolition of Local Boards in these districts, and draft rules regulating the constitution of the Miánwáli District Board are under consideration. Rules were also sanctioned by Government to regulate the imposition of the conservancy tax on houses situated in the Civil Station of Karnál, and rules under the Northern India Ferries Act were framed by the District Board of Siálkot and approved of by the Commissioner. In Ambala rules were framed by the District Board transferring certain of its powers and duties to its members (Tahsíldárs) under No. 15 of the Rules published in *Punjab Gazette* of 7th April 1887, Part III. The Deputy Commissioner observes that unless Tahsíldárs are made responsible for the less important public works, these works are altogether neglected. The changes were mainly made to improve matters in this respect.

Working of the District and Local Boards.

339. The working of the District Boards during the year under report has been on the whole satisfactorily reported on, but for the most part the actual work appears to be done by the official element, though the non-official members often render good service as a consultative and reporting agency. Local Boards, with some exceptions, are of little or no assistance, and have now been abolished in all the districts of the Delhi Division.

Finances.

340. The accounts and finances of District Boards are noticed in Chapter V.

Municipal Administration.

Number of Municipalities and Notified Areas.

341. After allowing for the exclusion of the frontier districts, with their Municipalities, the number of Municipalities remained the same. Two towns, Attock and Chakwál, were added to the list of Notified Areas.

Elective System abolished in Hazro.

342. In the case of the Municipality of Hazro, in the Ráwalpindi District, the elective system was abolished owing to the Committee having been found corrupt.

Elections.

343. There were 202 vacancies during the year amongst elected members, of which 65 only were contested, and the percentage of voters polling

averaged about 45 per cent. As a rule the percentage of voters polling was highest in the case of the smaller Municipalities. In the town of Rewári (Gurgaon) four candidates came forward for two vacancies, but before the election they agreed to draw lots and abide by the result, a proceeding which, as the Commissioner observes, furnishes rather a strange comment on our attempts to introduce representation. In the case of Nurpur, as noticed last year, no candidate has come forward for election for several years past, and there is now only one elected member on the Committee.

Meetings of Committees, and Attendance at Meetings.

344. The Municipal Committees of Delhi, Simla and Ambala, respectively, held 66, 62 and 59 well-attended meetings, heading the list as usual. Out of 137 Municipalities 29 failed to hold the prescribed minimum number of meetings, but all the more important Committees complied with the rules. Generally speaking, the average attendance was very satisfactory. The apathy of the Ferozepore Committee continues, as no less than 11 meetings had to be postponed for want of a quorum. Attock was the only Notified Area that failed to hold a meeting, and Okára held only one meeting, but otherwise the number of meetings held by the Committees of Notified Areas was satisfactory. In Siálkot as usual the number of meetings held was considerable.

Irregular Proceedings of Committees and Proceedings overruled.

345. On the whole, very few occasions arose which called for interference on the part of the Deputy Commissioner or Commissioner. The proceedings of the Rewári Committee were overruled in one case, where they wished to do away with the system of sending cheques for the countersignature of the Deputy Commissioner. In five petty cases the proceedings of the Sonepat Committee were set aside. In the Jhelum Municipal Committee a resolution permitting the resignation of the Second Master of the Board School whose dismissal had been recommended by the Inspector of Schools was overruled. No proceedings of the Gujrát Committee were set aside, but certain of them appear to have given rise to undesirable litigation. In the case of the Mooltan Division the proceedings of the several Committees had to be referred for reconsideration, and a case in the Mooltan Municipality, in which an employé who had been dismissed for embezzlement, was recently re-appointed to the post he held on the octroi establishment, formed the subject of correspondence with Government.

Rules and Bye-laws.

346. At the suggestion of Government bye-laws were introduced in all Municipalities with the object of securing prompt reports of deaths of Government pensioners resident within Municipal limits. The Election Rules of the Delhi Municipality were revised during the year. Additions and alterations to the Simla Municipal bye-laws were notified, defining the duties of the Superintendent of Water-Works, Health Officer and Assistant Secretary and Engineer. The Kángra Municipal Committee framed a bye-law for the grant of refunds of octroi paid on articles consumed in the manufacture of country liquor in the Kángra Distillery. The Ráwalpindi Committee Hackney Carriage Rules were amended and the Building Rules were revised. Building Rules under Section 92 of the Act were also framed by the Jhelum, Pind Dádan Khan and Gujrát Committees, and by the Minor Municipalities of Dera Gházi Khan District. Rules for the regulation of vaccine operations were passed by the Gujrát Municipal Committee, and they came into force on 6th June 1901. The rules have worked satisfactorily and were well received by the people.

General Working of the Committees.

347. With a few exceptions the working of the Committees in all the Divisions may be generally described as satisfactory. In the Gurgaon District the Municipal Committee of Farrukhnagar is said to be doing extremely well under the guidance of its Vice-President Khán Bahádur Mír Nasir Ali Khán, Superintendent of Salt Works. The working of the Hoshiárpur Committee is also specially commended. The Deputy Commissioner of Ambala remarks that the Ambala Committee has shown less respect of persons and more sense of public duty in the past year than formerly, and that the Jagádhri Municipality is now nearly a model among smaller and more old-fashioned Municipalities. The Ferozepore and Mooltan Committees are adversely commented on. Of the former the Deputy Commissioner writes:—"The Ferozepore Committee can hardly be said to have given satisfaction. It has frequently been complained of before, and I now have to bring to notice a strong tendency on the part of some of the members to

interfere with the harmonious working of the Committee apparently out of selfish or party feelings." Of the latter it is remarked that the working has been much below the average, and it would be more satisfactory if the Committee made some endeavour to understand and dispose of business matters in hand. The factional ill-feeling and self-interested motives which characterize the Committee are a discredit to any public body of men. No proceedings of the Lahore Municipal Committee were overruled during the year. The Deputy Commissioner of Amritsar reports that the octroi income of the Majítha Municipal Committee is smaller than it should be for a place with so large a population, and that the shortness of income is due to slackness and fraud in the management. The Deputy Commissioner has been asked by the Commissioner to report what steps he has taken to improve the management and prevent frauds.

TAXATION.

Imposition of new or withdrawal of old taxes.

348. The levy of a house-tax in the Delhi Municipality at $3\frac{1}{2}$ per cent. on annual rental was sanctioned during the year. The imposition of this tax created a good deal of opposition at first, but the excitement has now subsided, and no difficulties have arisen in connection with its collection. A revised octroi schedule for the Simla Municipality was approved of by the Punjab Government, and came into force in the current year, and a house-tax was introduced into some of the Notified Areas.

Income derived from taxation.

349. The total revenue derived from taxation in Municipalities and Notified Areas was Rs. 34,64,616 as against Rs. 29,53,588 (exclusive of the income of the districts of the new Frontier Province) last year, showing an increase of Rs. 5,11,028. The increase in octroi was Rs. 4,39,897, and in other taxation Rs. 71,131.

Octroi.

350. The increase in octroi was distributed over the different Divisions as follows (round numbers):—

	Rs.
Delhi...	1,48,900
Jullundur	53,300
Lahore	1,79,100
Ráwalpindi	22,400
Mooltan	36,200

With a few trivial exceptions the income of every Municipality shows a substantial increase under octroi, and this general result is, of course, due to the bumper harvest in rabi 1901, which enabled the grain-dealers in Municipalities to replenish their stores and which, following after a period of distress, caused a general revival of trade in all directions. In a few cases, however, special causes appear to have been at work. Thus, in Delhi City, there were increases of Rs. 28,190 from octroi on *gur*, and of Rs. 12,831 from that on building material, while in Kasúr the net octroi was 50 per cent. in excess of that of last year. The explanation of these increases in the case of Delhi is attributed by the Deputy Commissioner to the preparations for the coming Darbár which, in the Commissioner's opinion, is rather a remote cause. In the case of Kasúr the Deputy Commissioner will be asked to see that through-trade is not being taxed. In each of the cities of Lahore and Amritsar there was an increase of more than half a lakh of rupees, due, in addition to general causes, to better control and supervision of the collecting agencies. In Ludhiána the receipts on refined sugar show an increase of Rs. 1,600, due to increased imports of bounty-fed foreign sugar, the price of which was much lower than that of local manufacture. Since the close of the year under report the Government of India have issued general orders on the subject of octroi which will necessitate the revision of existing schedules in all Municipalities.

Other taxes.

351. The figures of the past year show an increase on those of the previous year of Rs. 71,000, which occurred chiefly in the Delhi Division, the Delhi and Simla Municipalities alone accounting for over Rs. 48,500. In Delhi the increase was mainly from the tax on vehicles and the toll on drays and carts, which were realised for six months only in the preceding year. In Simla

the increase was due partly to the realisation of arrears of the water-tax, which was imposed in 1900—to which extent it was nominal—and partly to the new tax on tongas and ekkas entering Simla, which yielded over Rs. 16,600 as against an anticipated income of Rs. 10,000. Other increases of importance occurred in Dera Gházi Khan and Lyallpur in the receipts of the house-tax in force there.

Incidence of taxation.

352. In the Municipal towns proper the average incidence of taxation was Re. 1-10-6 against Re. 1-8-7 in the previous year. The incidence of octroi, Class I (Grain), only was Re. 0-13-7 against Re. 0-13-1 in 1900-01, an increase that must be expected after an abnormal harvest. The average incidence of total octroi in the Municipal towns proper taking the Province as a whole was Re. 1-6-5 against Re. 1-5-8 in the previous year. This average was exceeded in none of the minor Municipalities, but was exceeded in 20 larger towns, the most notable exception being Simla (Rs. 5-8-4) as usual. The Commissioners of Delhi and Jullundur both point out that no satisfactory inference can be drawn from these figures of incidence, the population served bearing no necessary proportion to that of the serving centre and varying according to different articles in the octroi schedules. Among towns where taxation other than octroi exists to any noticeable extent, either together with octroi or without it, the only noteworthy cases are those of Simla (Rs. 15-6-6), Kasumpti (Rs. 8-5-8), Dalhousie (Rs. 7-4-6) and Murree (Rs. 6-0-2). The standard of taxation at these hill stations must always be exceptional.

Bonded warehouses.

353. The bonded warehouses at Delhi and Jullundur appear to be largely utilised. In the latter no fees are levied, and nearly 16 lakhs of rupees worth of goods were stored there during the year. In Ferozepore the godowns of the European exporting firms are used as bonded warehouses for the storage of wheat and rape-seed only. Improved arrangements have been introduced at Amritsar, where the bonded warehouse for grain is also the principal grain market of the city and the two bonded warehouses there are largely availed of. Bonded warehouses are maintained, as a rule, only in the larger Municipalities; where they exist elsewhere, they are little resorted to, and the necessity for such warehouses depends on a large measure on the adequacy of refund arrangements. Where, as in Amritsar, a bonded warehouse can also be utilised as a market, much convenience is obviously afforded to the trading community.

GENERAL.

Plague.

354. The year was chiefly marked by the outbreak of plague in several Municipalities in the Delhi, Jullundur and Lahore Divisions, the disease raging with such virulence in the town of Ludhiána that some difficulty was at one time experienced in obtaining means of conveyance of plague corpses to the burning ghâts. In the Mooltan and Ráwalpindi Divisions a few sporadic cases occurred, but the disease never assumed an epidemic form. In Ludhiána there was also a severe outbreak of fever. The year was a very unhealthy one in Lahore, and the Municipal Committee have now appointed a Health Officer for that city. In the Amritsar City plague did not appear until the close of the year, and the attitude of the people in regard to the measures then taken to combat it was satisfactory. The Lieutenant-Governor, on his visit to Jullundur in March last, took occasion to hold a Divisional Darbár at which those members of the Municipalities and other officials and non-officials who had rendered eminent service in connection with plague operations were awarded khillats, and a considerable number of sanads were also given by His Honour.

Sanitary improvements.

355. The water-works extension at Delhi was completed during the year under review, filter beds and settling tanks having been provided to supplement the supply from wells, and improvements were also carried out in connection with the Lahore water-supply system. The city of Ambala was provided with a sewage system, and definite arrangements have at length been made for the construction of water-works at Amritsar and for the erection of a new hospital and the extension of the present drainage system in that city.

Fires.

356. There were two or three severe outbreaks of fire at Rewári and Hidáyatpur Chháoni, but fortunately there was no loss of life. Two severe fires are also reported from Ambala City.

Military (Volunteers).

Strength and distribution of Volunteer Force.

357. The strength of the Volunteer Corps on the 31st of March 1901 is reported to have been as follows:—

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant Instructors.
Punjab Light Horse.	...	Field Officers and Staff	7	...	...	...	...	...
	A	Lahore	3	11	45	56	52	2
	B	Delhi	1	3	7	10	11	...
	C	Ráwalpindi	3	6	34	40	32	1
	D	Pálampur	1	1	20	21	20	...
	Sec.	Ambala	2	6	33	39	32	1
	...	Add for Officers	...	...	...	17	17	...
		Total	17	27	139	183	164	4
1st Punjab Volunteer Rifle Corps.	...	Field Officers and Staff	8	5	...	5	5	9
	A	Lahore	3	12	66	78	75	
	B	Lahore	3	12	57	69	69	
	C	Lahore	3	8	73	81	81	
	D	Ráwalpindi	3	6	61	67	67	
	E	Amritsar	3	7	31	38	38	
	F	Delhi	3	4	36	40	38	
	G	Murree	3	5	69	74	74	
	H	Ditto	2	3	38	41	40	
	Half Company Cadets	Ditto	...	1	14	15	15	
	I	Dharmsála	3	2	26	28	28	
	K	Ferozepore	2	8	43	51	46	
	L	Siálkot	3	7	44	51	50	
	...	Reservists	...	...	100	100	26	
	...	Add for Officers	...	...	...	38	38	
		Total	38	80	658	776	652	9
2nd Punjab (Simla) Volunteer Rifle Corps.	...	Field Officers and Staff	3	...	...	...	2	3
	A	Simla	1	9	55	64	64	
	B	Simla	1	9	75	84	68	
	C	Simla	1	8	30	38	38	
	D	Simla	2	9	47	56	56	
	E	Simla	2	10	64	74	74	
	Det.	Kasauli	...	1	5	6	6	
	...	Reservists	...	1	47	48	17	
	...	Honorary and Supernumerary Members	6	...	...	...	2	
	...	Add for Officers	...	...	...	16	16	
		Total	16	47	323	386	343	3
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	...	...	Not given.			
	A	Karáchi to Jungshahi	1	4	70	74	74	1
	B	Khánpur to Montgomery	7	14	92	106	106	1
	C	Lahore	17	14	134	148	148	1
	D	Lahore and Pathánkot to Lála Músa	2	13	71	84	84	1
	E	Jullundur to Ambala	3	8	55	63	63	1
	F	Saháranpur to Gháziabad	2	5	109	114	114	1
	G	Kotri to Radhan	3	6	59	65	65	1
	H	Lahore and Pathánkot to Lála Músa	4	19	103	122	122	1
	I	Jacobabad to Quetta	3	10	56	66	66	1
	K	Jhelum to Peshawar	6	16	111	127	127	1
	L	Rohri to Ruk	6	13	87	100	100	1
	M	Karáchi City	3	5	68	73	73	1
	...	Add for Officers	...	...	...	57	57	...
		Total	57	127	1,015	1,199	1,189	12
		GRAND TOTAL	111	254	1,996	2,361	2,184	24

The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps and the North-Western Railway Volunteer Rifles were inspected in March 1902. The 2nd Punjab (Simla) Corps was inspected in October 1901. The results were considered satisfactory.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Agriculture.—(1) Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1901.

(2) Annual Report on the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1901-02.

(3) Report on the Land Revenue Administration of the Punjab for the agricultural year, 1st October 1900 to 30th September 1901.

Weather and Crops.—(1) Report on the Meteorology of the Punjab for the year 1901-02 published in the *Punjab Gazette* of 17th July 1902.

(2) Report on Crops in the Punjab for the year 1901-02.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1902.

Forests.—Progress Report on Forest Administration in the Punjab for 1901-02.

Manufactures.—See text.

Trade.—(1) Annual Returns of Internal Land Trade of the Punjab for the year 1901-02.

(2) Report on the External Land Trade of the Punjab for the year 1901-02.

Irrigation.—Revenue Report of the Irrigation Department in the Punjab for the three years 1899-1900 to 1901-02, *shortly to be published.*

PUBLICATIONS OF GOVERNMENT OF INDIA STATISTICAL OFFICE.

Agriculture.—As to *prices* see "Prices and Wages" in India, nineteenth issue, 1902.

Weather and Crops.—(1) Agricultural Statistics of India, seventeenth issue, 1902, Tables 3-H, 4-H, 12 and 13-E.

(2) Area and yield of rice, wheat, &c., &c., 1902.

Mines and Quarries.—Statistics of Mineral Production in India, 1902.

Manufactures.—Judicial and Administrative Statistics of British India, Table XIX (Factories).

Trade.—Accounts of the Trade carried by Rail and River in India, fourteenth issue.]

Agriculture.

EXPERIMENTAL CULTIVATION.

Experimental farm.

358. An experimental farm on two squares of land in the Chenab Colony near the town of Lyallpur was started in May 1901, and placed in the charge of a Manager who has an excellent diploma from the Cawnpore Farm, is trained in revenue and land surveying, and has a good knowledge of English. Quarters for the Manager and the farm labourers and a store-room have been built on the land, and a cattle-shed is in course of construction. A small plot has been reserved for vegetables, and the remaining land has been parcelled out in plots of a quarter of an acre each, each plot having a separate distinguishing number. The land has been fenced with a hedge of *phulái* (*Acacia modesta*). Some kharíf crops were sown, of which the *jowár* proved most successful both

as regards yield in grain and stalks. The Choya Saidan Shah (Jhelum District) maize was particularly good and attracted attention, but the local variety of maize was damaged by rats. The result of each experimental crop will be noticed in the report of next year, to which the operations properly relate. It may be noted, however, that an "interesting experiment of manufacturing *gur* from the juice of the *chari*" stalks grown on the farm was made. The production is apparently as sweet as that of the sugarcane, but the yield in the form of condensed *gur* which is 10 per cent. of the weight of stalks in the case of canes was 6 per cent. in the case of *chari* stalks. A plot one-quarter of acre of land has been manured with powdered gypsum and wheat sown on it. Many other varieties of wheat have also been sown for experimental purposes.

Improvement of Punjab wheats.

359. Thesanction of Government has been received to the entertainment of two additional Assistant Managers to supervise experimental cultivation of local wheats in some selected gardens of District Boards. The men employed are at present undergoing practical training in the Government Farm at Cawnpore. It is hoped that the experiments will be started next rabi.

Cross-bred Australian wheats.

360. Some varieties of cross-bred Australian wheat were received from New South Wales and distributed to several districts for experimental cultivation. They were generally sown on garden soil irrigated by wells, or on land served with canal water. Except in Gujránwála and Amritsar the stalks and leaves were rusted in all places, but the grain was not affected. The seed, however, was too small in quantity to enable a fair test of the experiment as regards yield. A small quantity of the produce of each variety has been sown for further experiments in the Government farms at Lyallpur.

Paspalum dilatatum.

361. A very small quantity of seed of *Paspalum dilatatum* grass which is well known in Australia and is reputed to be a drought-resisting grass was received from the Superintendent, Royal Botanic Garden, Calcutta. Some of it was sent to the Superintendent, Cattle Farm at Hissar, for experimental cultivation, and the rest sown in an office compound at Lahore, where the soil is *kalreti*, *i.e.*, clayey impregnated with saline matter. The experiment at Hissar proved a total failure, but that made at Lahore was successful. The grass attained a height of four feet and gave a good supply of fodder; but it was grown under favourable conditions as regards irrigation. It does not appear to thrive on soil which is much impregnated with *kallar*, and it is not by any means certain that it will thrive without irrigation. In the Ambala Dairy Farm where it was tried as an unirrigated crop, it proved disappointing, and the failure in Hissar may also be due to the lack of sufficient moisture. A further supply of the seed has been ordered, and some seed from the crop grown in Lahore has been preserved. It is proposed to try it on a larger scale on the *sailáb* land in Mooltan in the date-palm plantation.

Sugar beet.

362. An attempt to manufacture sugar from sugar beet was made by the Superintendent, Agri-Horticultural Gardens. The result was not satisfactory, the percentage of impurity being too high to make the "jaggery" worth refining. The experiments made in the United Provinces have likewise failed; and according to the Director of Land Records and Agriculture of those Provinces "without expensive extracting machinery beet sugar cannot be made sufficiently pure to be of use to the refiner, and the central factory system is out of the question owing to the difficulty of storing the produce in the hot weather."

Date cultivation.

363. Since the close of the year 9 male and 70 female offsets of Arabian date trees were received from the Agency Surgeon at Muscat and planted in a plot of Government land, near the river bank about 3 miles from the Mooltan City. The young plants are doing well at present, but their growth has yet to be watched. A protective dam to secure the land against being flooded by the river inundation is required. This will be made as soon as possible.

364. The sweet potatoes imported from America in 1899 and cultivated in the Agri-Horticultural Gardens at Lahore did not prove a success owing to the hardness of the soil. Their further cultivation at Lahore was therefore stopped and some tubers sent to Ferozepore for experimental cultivation. A part of the seed was sown in a piece of land near the District Board garden, and although the yield was not very great the quality of the tubers was improved by the change of locality. The Deputy Commissioner has been asked to continue the experiment. Other crops.

Several other minnor experiments were made in various districts with acclimatized seeds of grain of sorts grown in the Agri-Horticultural Gardens of Lahore; and it is satisfactory to observe that much interest is taken in the seeds so supplied. The Palestine wheat sent to Dera Gházi Khan-Bruce-abad Farm has deteriorated in quality. In the Lahore Gardens this wheat in some years has given a greater yield than the local varieties sown under similar circumstances; and by making a selection of the seed its quality is maintained.

Some varieties of hill rice have been sent for experimental cultivation to New South Wales, through the Reporter on Economic Products to the Government of India. A small consignment of the Kángra Valley tea has also been sent to the Secretary for Agriculture in Australia for experimental cultivation in the eastern part of Victoria.

There is not much demand for *Inga Dulcis Mimosœa*. It is delicate and requires a sheltered situation. For field hedging the *phulái* (*Acacia modesta*) is preferred.

Veterinary and Live Stock.

365. The three years' course was introduced into the Punjab Veterinary College in 1900, and consequently during the year no final examination was held. The result of the examinations in both the First Year and Second Year's Classes was distinctly good, 44 out of 54 candidates passing in the former and 24 out of 29 in the latter, and in spite of the fact that the College staff was handicapped by the absence of the European Professor, a high standard appears to have been reached in the various subjects taught. There was a slight decrease in the number of candidates for the Entrance Examination as compared with the previous year, but the numbers and the College roll have reached the high figure of 130 and the popularity of the institution continues unabated. The Punjab Veterinary College.

There was a decrease of income amounting to Rs. 630 as compared with last year's figures, which is partly due to the loss in fees from paying students from other Provinces and partly to the decrease in practice fees. The Principal being single-handed was unable to devote sufficient attention to this work in addition to his other duties.

366. The demand for Veterinary Assistants remains very great, applications from all sources being numerous. The men sent to Africa have generally been well reported on. Men in private practice are doing well, and more of them will start soon as they are encouraged by the success of those who have already done so. The demand for trained farriers continues, and at the examination of the Shoeing Smith's Class all candidates passed. Demand for Veterinary Assistants and Farriers.

367. One-thousand three hundred and seventy-seven animals were castrated during the year by the Veterinary Assistants. Of those 1,042 were horses, 106 mules, 219 bulls and 10 other animals. The number of animals castrated last year was 1,312. Castrations.

368. The total number of horse stallions belonging to the Imperial Department at the end of the year, excluding the districts transferred to the North-West Frontier Province, was 156, or the same as last year. Of these 122 were employed on stud work, and 7,246 mares were covered against 6,592 last year. There were 10,864 branded mares on the register at the close of the year. Of these 1,146 mares were in Lahore, 1,065 in Dera Gházi Khan, 879 in Horse-breeding.

Ráwalpindi, 839 in Jhang, 686 in Ferozepore, 647 in Gujránwála, 634 in Shahpur, and the remaining in other districts of the Punjab. The average number of mares covered by each stallion was 59·39 against 54·03 last year, and the average number of produce was 13·05.

Cattle-breeding.

369. The sum of Rs. 2,000 sanctioned by the Local Government for the purchase of Hissar bulls for different districts was made full use of. Sixteen bulls were purchased and supplied to districts whose finances were crippled by famine and plague operations.

Mule-breeding.

370. The total number of donkey stallions on the register was 277; out of these 245 were employed on stud work. Two hundred and twenty-four of these were employed on mule-breeding and covered 15,696 pony mares. The remaining 20 donkey stallions were employed on donkey breeding and covered 1,379 donkey mares. The average of mares covered per stallion for mule-breeding was 76·19 against 62·44 last year, and on donkey breeding 68·95 against 66·56 last year. The coverings both of pony and donkey mares show an increase over past year.

Horse and mule breeding by agency of Local Bodies.

371. During the year the Local Bodies employed 4 horse and 91 pony stallions on stud work, and private persons 3 pony stallions. No stallion was employed by the Court of Wards. The Local Bodies also employed 13 donkey stallions during the year. The result of the pony and mule breeding operations was considered favourable.

Live-stock and cattle diseases.

372. The total number of animals treated by Veterinary Assistants in villages was 55,601; of these 10,369 were horses and ponies, 38,742 cattle and 6,490 other animals. Of the animals attacked, 528 were cases of rinderpest, 628 of anthrax, 30,231 of foot and mouth disease, and 24,214 of other diseases. The percentage of mortality was 2·32. The number of animals treated at dispensaries was 21,195. Of these 1,232 were in-patients and 19,963 out-patients. The percentage of mortality was 1·12. Inoculation as a preventive for rinderpest was carried out in 16 villages of the Jhelum, Ráwalpindi and Lahore Districts, and 1,279 animals were inoculated, of which 2 died after inoculation. Inoculation against anthrax was carried out in 2 villages of the Lahore and Siálkot Districts.

AGRICULTURAL PESTS.

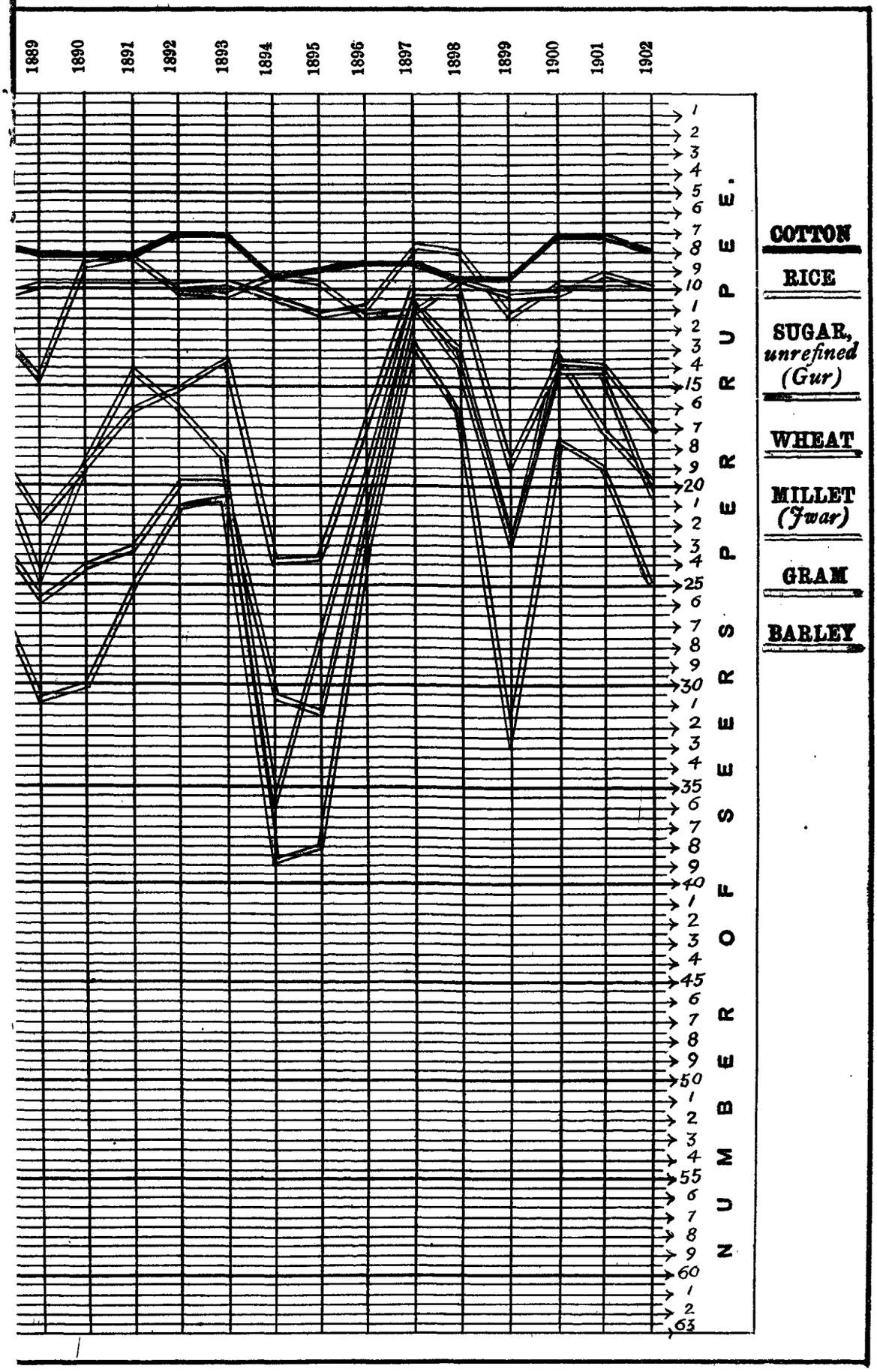
Entomology.

373. A caterpillar, which had done damage to the cotton crop in the Mooltan District last year, appeared in the Fázilka Tahsíl of the Ferozepore District and injured cotton, maize and *jowár* crops. The Settlement Officer, Sirsa-Fázilka, was asked to advise the zamíndárs to make a careful ploughing of the land on which the affected crops had grown in order to break up the pupas and prevent the pest from recurring next year. The Deputy Commissioner of Shahpur sent specimens of an insect called *tcka* which had done damage to the cotton crop in that district. These were sent for identification to the Entomologist, Indian Museum, Calcutta, who reported that the insects were grasshoppers belonging to the family Acrididae and the species Chrotogonus Sanssuric Bolio, and who said that, although a number of reports had been received by him relating to the damage done to crops by this insect, he was unable, owing to its life history being unknown, to recommend any special remedy. He, however, suggested the destroying of these insects by means of poisoned leaves laid out as baits amongst the crops, as this plan has proved successful in other parts of the world.

Locust fungus.

374. Tubes of fungus supplied by the Imperial Bacteriologist for destroying locusts were sent with English and Vernacular copies of instructions to Deputy Commissioners of districts where locusts had appeared, but the reports received are to the effect that the fungus has not proved effective in destroying locusts.

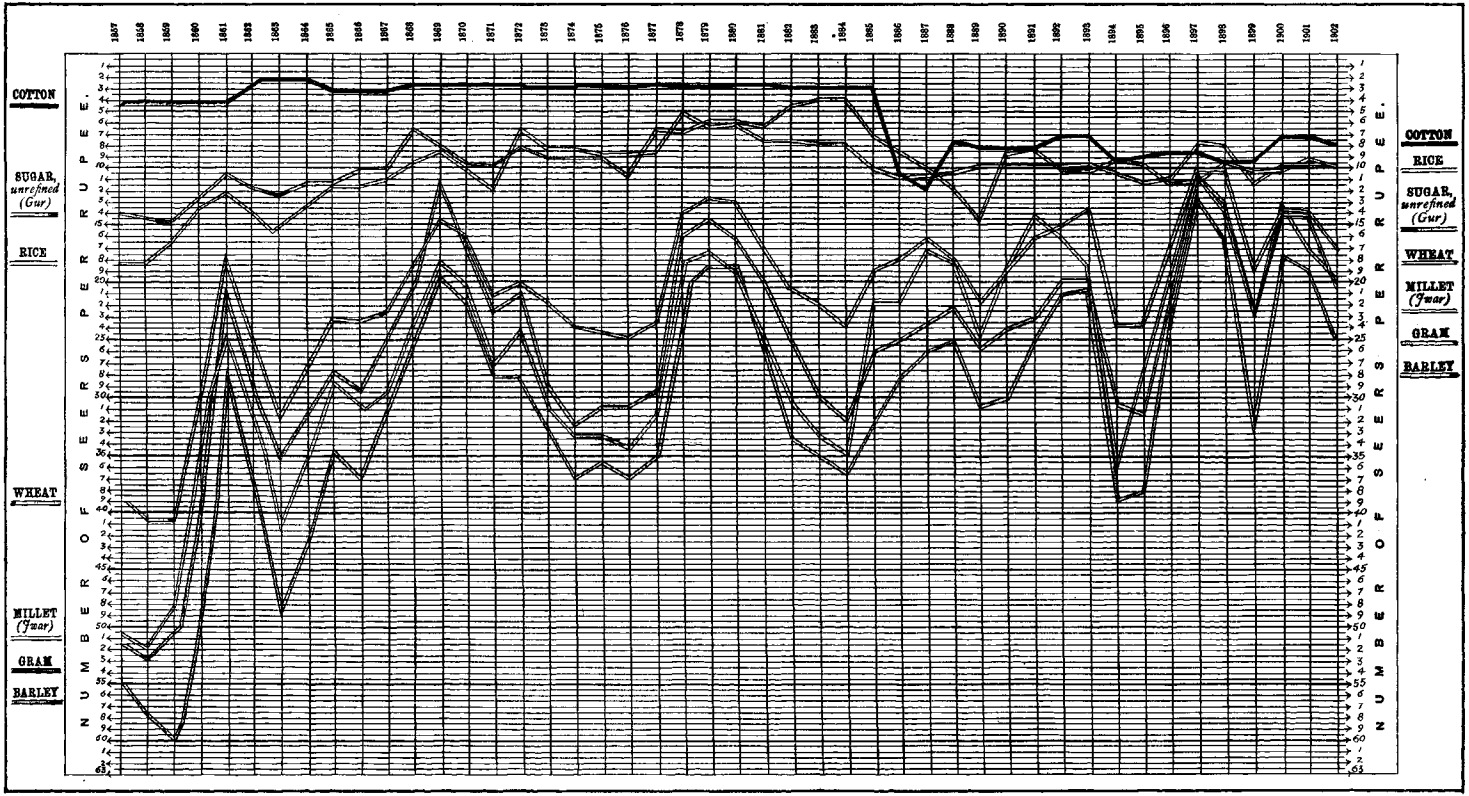
THE PUNJAB, FROM 1857 TO 1902.



ip to 1885 and of cotton (uncleaned) from 1886 onwards as price of former

prices are those of Amritsar, the principal grain mart of the Province.

DIAGRAM SHOWING THE RISE AND FALL IN PRICES OF PRINCIPAL ARTICLES OF AGRICULTURAL PRODUCE IN THE PUNJAB, FROM 1857 TO 1902.



Litho-Punjab Govt. Press, Lahore

Prices of cotton (cleaned) given up to 1885 and of cotton (uncleaned) from 1886 onwards as price of former is not available.

From the year 1886 onwards the prices are those of Amritsar, the principal grain mart of the Province.

Rats.

375. In various parts of the Punjab, especially in the districts of Ferozepore and Lahore and in the Chenab Colony, rats caused extensive injury to growing crops. The dry autumn was favourable to the spread of these pests, but little could be done to reduce their numbers.

Loans to Agriculturists.

Advances and recoveries.

376. Advances are made under the Land Improvement and Agriculturists' Loans Act (XIX of 1883 and XII of 1884). The year under report was not a very important one as regards the working of these two Acts. The kharíf of 1900 was a good one, and good sowings were obtained for the rabi of 1901 which, with seasonable rains, produced a bumper crop. Rain fell, too, in time for the kharíf sowings of 1901, which were effected on the whole without resort to Government for pecuniary assistance. The difference in the figures for the Hissar District, where only Rs. 350 and Rs. 24,944, respectively, were advanced as against Rs. 43,627 and Rs. 10,48,700 for 1899-1900, are characteristic of the returns for the Province as a whole. The main interest, however, centres in the recoveries of sums outstanding from the previous year, and these as might be expected were very considerable. Hissar reduced its liability from the large sum of Rs. 12,95,542 to Rs. 8,64,360, which represents a recovery of Rs. 4,31,182, or more than half the amount of the annual land-revenue demand of the district. In Rohtak similarly nearly 2 lakhs were got in, leaving a liability of only Rs. 1,04,440.

Prices.

377. Prices of food-grains at the principal marts of the Province have varied but little during the year, the normal rates with which the previous year of abundance closed having been maintained throughout. At Delhi wheat sold wholesale at rates varying from Rs. 2-8-8 to Rs. 2-12-2 per maund, while the highest and lowest rates in the markets of Ferozepore, Lahore and Amritsar were Rs. 2-8-0 and Rs. 2-0-9 per maund, respectively. At Mooltan and Ráwalpindi the highest and lowest selling prices for wheat were Rs. 2-12-1 per maund in May and Rs. 2-1-6 per maund in November. The price of maize has throughout remained below Rs. 2 per maund, the rate generally being Re. 1-13-0 per maund at Delhi, Re. 1-11-0 at Ráwalpindi and Ferozepore, Re. 1-10-0 at Mooltan, and Re. 1-7-0 per maund at Amritsar. The price of *ghi* has fallen from Rs. 40 to Rs. 30 per maund. At Ferozepore it was selling at Rs. 28-8-0 per maund in September 1902 as against Rs 41-8-0 per maund in October 1901.

Weather and Crops.

Spring and Summer, 1901.

378. Following upon a winter of unusually heavy rainfall the months of March and April 1901, when early kharíf crops are sown, proved somewhat dry, with the result that sugarcane, cotton and indigo were not largely sown. The rainfall in May was slightly above the normal, and this rainfall, though injurious to the wheat on the threshing floor, was beneficial to the young cotton. In June there was a long break, and on the whole the pre-monsoon period was drier than usual. The monsoon did not commence till the middle of July. In that month the rainfall was below average in Hissar, Rohtak, part of Ferozepore (Moga and Fázilka), part of Mooltan and the Sutlej Tahsíls of Montgomery. In other districts it was average or above the average, but it was irregularly distributed: Jhelum for instance received 6 inches in excess of the normal, while Ráwalpindi showed a defect of 5 inches. A single heavy fall at the end of July accounted for nearly the whole of the monsoon rainfall in Lahore. There was heavy rain generally at the end of July and beginning of August, but there was practically a continuous break in the rains in August and September. The little rain received in the latter month was given by thunderstorms which usually mark the close of the rains, and the amounts received were below the normal fall of the month at all stations except Gurdáspur, Jhelum, Ráwalpindi and part of Gujrát. In Kángra only was the rainfall excessive, though not abnormally so, and in

Hoshiárpur, although it was not equal to that registered in the autumn of 1900, it proved sufficient except in the case of the rice crop which felt the want of rain and suffered in consequence. The kharíf crop, on the whole, was decidedly below the normal, the drought of September accompanied by dry western winds withering the crops on a large portion of the *bárání* lands. The floods in the rivers too were low and of short duration. Some injury to the crops was also caused by locusts in Ráwalpindi, Jhelum, Siálkot, Simla, Kángra and Dera Gházi Khan, and by field rats in the districts of Montgomery, Gujrát, Lahore and Ferozepore.

Winter Rains.

379. A drier cold weather season than that which followed was probably never known in the Punjab. The moisture left by the monsoon was in most places dried up by the western winds that followed. In October and November there was no rain at all, and in the winter months of December to March the total rainfall nowhere reached one inch, except in hill stations and in the submontane districts of Ráwalpindi and Gujrát, the registers kept at the last two stations giving a total of 1·01 and 1·34 inches respectively. Late sowings were impossible, and the standing crops on unirrigated lands were only saved from utter destruction by the light showers which occurred in March. High winds and severe frost in February also proved detrimental to the growing crops. The spring was therefore worse than the autumn.

Kharif Crop of 1901.

380. The account given above of the seasons shows that the pre-monsoon rainfall of 1901 on which early kharíf sowings are dependent was deficient. The rabi crop of that year too had proved a very heavy one, so that the harvesting was protracted, and with a good crop in hand there was the less inducement to prepare for kharíf sowings. The total area sown amounted to 11,838,707 acres as compared with 12,605,885 acres in the kharíf of 1900, a decrease of 6·1 per cent. Owing to the early cessation and irregular distribution of the monsoon current the failures of the kharíf harvest were very heavy indeed, amounting to 35·3 per cent. of the total area sown. The failure on unirrigated land amounted to 3,816,665 acres, or 45·3 per cent. of the area sown. In Hissar hardly 4 per cent. of the unirrigated crops were harvested and the yield in other places was poor. On irrigated land the failures of crops amounted to 10·6 per cent. This proportion of failed crops on irrigated land was especially high in the case of land depending on inundation canals. The early cessation of the monsoon in September caused a failure of the water-supply in such canals at a critical time both for the kharíf and rabi crops. The largest amount of failure on irrigated land occurred in the districts of Mooltan, Lahore, Montgomery, Ferozepore and Dera Gházi Khan in the order named.

Rabi Crop of 1902.

381. The failure of the monsoon and the entire absence of the usual winter rains proved still more disastrous to the rabi crops. The total area sown amounted to 12,516,520 acres compared with 16,422,083 acres in the rabi of 1901, and the crop failure amounted to 3,387,858, or 27 per cent., of the total area sown. Of the irrigated crop which was sown on 6,580,033 acres, 11·9 per cent. failed, and of the unirrigated crop sown on 5,936,487 acres as much as 2,607,757 acres, that is, 43·9 per cent., failed.

Total Crops.

382. The total of crops sown during the year amounted to 24,355,227 acres, namely 9,994,266 acres irrigated and 14,360,961 acres unirrigated. The total of harvested area was 16,787,832 acres,—irrigated 8,851,293 acres, unirrigated 7,936,539 acres. The total of the two harvests as regards yield may be estimated at about 70 (100 = normal). This is about equivalent to an 11-anna crop. The proportion of the rabi to the total area harvested this year has fallen off by more than 4 per cent., but it still continues to form the major portion of the cultivation.

Irrigated Area.

383. As usual in a year of short rainfall there was an increase in the irrigated area. Irrigated crops taken alone give an increase of 849,192 acres, or 9·3 per cent., over the previous year's total. This increase is most marked in Karnál, Hoshiárpur, Delhi, Gurdáspur and Siálkot. There was abundance of fodder, and cattle were in good condition, so that the people were able to make full use of their wells when the rains failed.

Unirrigated Area.

384. The area sown on unirrigated lands was 14,360,961 acres as against 19,882,894 acres last year, thus showing a decrease of 27·8 per cent. The largest decreases were in Lahore 60·1 per cent., Montgomery 49·8 per cent., Ferozepore 49·7 per cent., Amritsar 46·5 per cent., Siálkot 41 per cent., Gujránwála 37·8 per cent., Delhi 37·7 and Karnál 36·3 per cent., and these are the principal districts of the tract that suffered most from the insufficiency of the rainfall. As regards the failure of crops on unirrigated lands the district of Hissar, which lost about 95 per cent. of its crop, suffered most. The failure in Rohtak, Ferozepore and Jhelum amounted to 68, 63·7 and 60·5 per cent. respectively; in Lahore the proportion of failed crops was 58·8 per cent., in Gujránwála 48·6 per cent., in Karnál 45·2 per cent., and in Ráwalpindi and Shahpur a little over 41 per cent.

Kinds of crops.

385. The distribution of the various crops was as follows :—

Crops.	1900-01.	1901-02.
Wheat	29·1	33·7
Barley	5·4	3·4
Jowár	7·0	5·1
Bájra	10·8	8·0
Maize	4·3	7·2
Gram	12·5	7·1
Other food crops	10·1	11·7
Oilseeds	6·3	3·7
Sugarcane	1·2	2·1
Cotton	3·9	5·1
Others	9·4	12·9
Total	100	100

The divergences in these figures are due to the difference in the climatic conditions of the two years. In the year 1901-02, a year of deficient rainfall, the area of crops dependent on rain,—barley, *jowár*, *bájra*, gram and oil-seeds,—has naturally decreased, and although there is an actual decrease in the total area of all crops there is a relative increase in the proportion of the more valuable crops,—wheat, maize, sugarcane and cotton,—which are grown with the aid of irrigation.

The largest decrease occurs in the area covered by the gram crop, which has fallen off from 3,254,943 acres in 1900-01 to 1,186,899 acres this year, or by 63·5 per cent. This crop depends chiefly on the rainfall of September, and as this was extremely small a different result could hardly be expected. Oil-seeds which are grown principally on unirrigated land have fallen off by 62·5 per cent., while *bájra*, *jowár* and barley, which are food crops of inferior quality, have also decreased. The actual area of wheat harvested decreased from 7,607,080 acres in the rabi of 1901 to 5,652,103 acres in the season just concluded, the difference amounting to 25·7 per cent. Maize and sugarcane are the only

crops of which the harvested area this year is in excess of that returned last year, the increase being 7·8 and 8·5 per cent. respectively. The increase in sugarcane is confined mainly to the Chenab Colony and the Jullundur Doáb. In spite of this increase in area the yield is estimated to be 5 per cent. below that of last year.

Cotton Crop.

386. The cotton crop is becoming a more important one than it used to be. Last year's crop was the largest on record and yet the decrease this year as compared with the former amounts to 16·7 per cent. only. As regards yield the crop is estimated to have proved better than any in the preceding ten years. Roughly estimated the outturn amounted to 219,646 bales as against 205,203 bales in 1900-01.

Hissar.

387. *District figures.*—The significant facts as regards the Hissar District are the entire loss of nearly $1\frac{1}{2}$ millions of acres of unirrigated crops in the kharíf, and the comparatively insignificant area sown for the rabi on *bárání* lands. The total harvest of the year amounted only to 248,332 acres compared with over 2 million acres of crops in the previous year. The figures forcibly illustrate the violent fluctuation of good and bad fortune which this district experiences.

Remainder of Delhi Division.

388. In Rohtak the area sown on irrigated lands exceeded that of last year by 24,451 acres, but waterings from the canal were not sufficient, and 6·4 per cent. of the area failed to bear a successful crop. The outturn was about 88 per cent. of the normal. As regards unirrigated crops they were sown on a larger area in kharíf, the increase compared with the previous year's kharíf amounting to 38,941 acres, but 68 per cent. of the crops failed. In Gurgaon there was some increase in irrigated crops, but by far the greater portion of the cultivation depends for its growth on rain water. In the beginning the prospect was hopeful and a bumper kharíf harvest was expected, but as the season advanced and the rains ceased followed by strong western winds the situation was reversed, and about 24 per cent. of the crop on *bárání* land was lost. Rewári Tahsíl suffered the most, the harvest there being one-half the normal. The outturn of *bájra* and cotton was good, but the *jowár* crop failed to a large extent. *Chari* fodder was very plentiful in this district. In Delhi there was an increase of 79,728 acres in the area sown on irrigated lands, but sowings on the unirrigated area contracted by 227,650 acres. The harvest, on the whole, was fair, and was considered to be a 10-anna one. Conditions were worse in Karnál as, although the area sown did not show a larger decrease than Delhi, the proportions of failed crops both as regards irrigated and unirrigated lands were greater and the yield was poor. Much of the area classed as harvested in the kharíf yielded no grain but only fodder. In Ambala the area under irrigated crops was more than double of last year's, but the unirrigated cultivation was less by 14 per cent. The cotton and rice crop suffered most, and on the whole the harvest of the year was a 12-anna one.

Jullundur Division.

389. In Kángra the area sown and the area harvested in the kharíf was more than the corresponding record of 1900, but on account of excessive rains the crops on irrigated lands were not so good as they should have been. In the rabi also, sowings on irrigated lands increased from 78,005 acres in 1901 to 81,454 acres this year, but the total of the unirrigated crop sown decreased from 290,272 acres to 259,557 acres. About 8 per cent. of the former class of crops and 36 per cent. of the latter failed to mature, and the yield on the whole was much below the average. In Hoshiárpur and Jullundur the kharíf harvest was in no way inferior to that of the preceding year, but the rabi crop was decidedly worse. The neighbouring district of Ludhiána suffered less from the drought than any other district. The yield, especially of gram, in the Jagraon Tahsíl was excellent. The district of Ferozepore in this Division, on the other hand, may be classed with Rohtak as regards adverse agricultural results. The total areas sown on irrigated and unirrigated land fell short of last year's totals by 6·1 and 49·7 per cent. respectively, and the proportion of the areas failed amounted to 16 and 63·7 per cent. The severity of the drought was much felt, and drinking wells were utilized for irrigation in parts of the district.

Mooltan Division.

390. In the Mooltan Division the districts of Mooltan and Dera Gházi Khan present considerable variations from the results of last year. In the former district there was little difference in the sowings on unirrigated lands, but on account of the deficient supply of canal water the area sown on irrigated lands decreased by 79,614 acres, or 10·2 per cent. About one-quarter of the crop of both classes failed to mature, and the yield of the rest was below the average. The cotton crop, however, gave a better yield. The rabi harvest in the Shujabad Tahsíl was the worst within the last ten years. In the Dera Gházi Khan District the low level of the river floods and the short supply of water in the inundation canals are noticed in the district reports. Locusts and an insect, called *tiddi*, also caused some failure of the kharíf crop. Of the total decrease of 156,592 acres in the harvested area of the year as compared with 1900-01 as much as 47,535 acres belong to the *jowár* crop and 64,548 acres to oil-seeds. The wheat crop was in excess of last year's by 7,333 acres. The outturn of the irrigated crop on the whole was average.

Lahore Division.

391. In Lahore there was not much difference in the extent of cultivation of irrigated lands, but the unirrigated area sown was only 267,658 acres, or 60·1 per cent., below the area of the same class recorded last year. The sugarcane, rice and maize crops show an appreciable increase, while cotton, the inferior kharíf crops and the rabi crops in general show a decrease. The yield of the kharíf harvest was about 15 per cent. below the normal, while that of the rabi was 70 per cent. of the normal. In Amritsar the kharíf was not so bad, but in the rabi "the wheat harvest fell below that of last year by 61,764 acres and gram by 82,457 acres." The area under fodder crops and that under maize and rice exceeded last year's figures by a few thousand acres. In Gurdáspur there was a decrease under all classes of kharíf crops, except cotton and *másh*, and the rabi harvest, on the whole, according to the Deputy Commissioner, was "the worst harvest since settlement, for, though there was an increase of 59,735 acres in the irrigated area harvested, there was a decrease of 239,145 acres in the unirrigated area." In Montgomery the area under kharíf crop on unirrigated land fell short of last year's kharíf by 21,857 acres. The crop on the whole was a 10-anna one as regards yield. The rabi harvest in this district was still worse. Compared with last year there was a decrease of 81 per cent. under head "irrigated" and 87 per cent. under unirrigated crop. The decrease principally occurred in the Ravi Tahsíls. In Siálkot there was an increase of 154,196 acres in the crop sown on irrigated lands during the year, while the unirrigated crops decreased by 317,764 acres. In Gujránwála the area sown in the kharíf harvest was only 1 per cent. less than the corresponding harvest of last year, but owing to extensive failure of crops the area harvested was 13 per cent. below last year's figures. In the rabi the total area sown fell by 15 per cent. as compared with 1901, but it was 9 per cent. above the past quinquennial average. Referring to this increase, the Deputy Commissioner states that "although there were not timely rains when the rabi crops were being sown, yet the peasantry showed great activity in sowing." This enterprise, however, met with an unfortunate result as 52·2 per cent. of the area sown on unirrigated lands in the year failed. The yield was much below the average, and the peasantry suffered very badly.

Rawalpindi Division.

392. There was a good fall of rain in the third week of September throughout the Ráwalpindi District, and although the kharíf crops suffered from the short supply of moisture here and there, the harvest on the whole was a moderate one. The area of rabi sowings exceeded that of last year's rabi by 56,000 acres, but the failure of the winter rains caused a loss of about 48 per cent. of the crop sown. In Jhelum the kharíf crops that survived yielded heavily, but unfortunately they were for the most part destroyed by locusts at an early stage. The kharíf crop on the whole was a smaller one than in any recent year except 1898. The rabi crop was little more than a 4-anna one on the whole, and in 10 villages supensions were granted. The district of Gujrát enjoyed a comparative immunity from drought in the kharíf. The total area sown was 349,850 acres as against 373,862 acres in the kharíf of 1900. The outturn of cotton, rice and sugarcane

was very good, and that of maize satisfactory. The rabi harvest in this district was, however, much worse, being the smallest on record with the exception of the rabi of 1900, which was a famine year. Oil-seed crops on *bárání* lands failed entirely. In Shahpur the decrease in total cultivation amounted to 7 per cent. only in the case of unirrigated crops, while owing to the opening of the Jhelum Canal unirrigated crops were 2·5 per cent. more in area than those of the previous year. Owing, however, to the general drought 41·1 per cent. of the unirrigated crops failed to mature.

Horticulture.

General.

393. There are public gardens at Delhi, Simla, Lahore, Amritsar and Ráwalpindi, and of smaller dimensions at the head-quarters of most other districts. These are managed by Municipal Committees and District Boards. The income and expenditure in each case is included with that pertaining to arboriculture and cannot be separately given. These gardens, besides filling the place of public pleasure grounds, generally contain areas from which fruit and vegetables are sold to all purchasers. They are used also as nurseries for fruit and other trees and for the purpose of experimental cultivation.

Government Agri-Horticultural Gardens, Lahore.

394. In addition to these District and Municipal gardens, there is the Government Agri-Horticultural Garden at Lahore, which is managed by a botanical expert under the control of the Director of Agriculture. Here too the maintenance of public pleasure and flower grounds, the production of fruit, fruit trees, vegetables, flowers and seeds for sale, and the experimental cultivation of new varieties are features in the management. A botanical section of the garden to which science students at the University may resort is also maintained. The total income and expenditure of the Government Garden during the year 1901-02 were Rs. 15,567 and Rs. 24,006 respectively. Some of the agricultural experiments already noticed in this chapter were carried out in this garden.

Fruit Culture.

395. The Simla Municipality supplied 4,000 fruit trees in return for the sum of Rs. 1,500 received by that body from the Punjab Government for the Mahásu Orchard near Simla. These were allotted to the Political Agent, Dir and Swat; Officer Commanding Chakdara; Political Officer, Tochi Valley; Officer on Special Duty in Kurram; Officer Commanding Darghai; and Deputy Commissioners, Hazára, Kohát, Pesháwar, Siálkot, Jhelum, Kángra, Ambala and Simla. The reports received show that the trees are in good condition and progressing very well. Twenty new mango trees were planted in the Shálamár Garden, and 100 oranges, 100 peaches, 40 apples and 25 pomegranates in the Shahdara Garden. The expenditure on the Kudsia and Roshanára Gardens in the Delhi District exceeded the income by Rs. 3,392. Fifty-four mango trees were planted during the year in the former and 200 oranges in the latter garden.

Forests.

Alteration of area.

396. The area of Reserved Forests underwent a net decrease of 223,632 acres; 467 acres of the Chenaki Reserve were added during the year, being handed over by the Military Department; and 225,335 acres of Reserved Forests in the Shahpur Division were disforested with a view to giving them out for colonization purposes. The Protected Forests show a net decrease of 76 acres.

The 225,335 acres of Reserved Forests which have been disforested in Shahpur have been added to the area of Unclassed Forests. Sixteen thousand nine hundred and seventy-one acres of Unclassed Forests in Lahore were transferred to the Colonization Department and 16,493 acres in Mooltan to the

Civil Department. There was thus a net increase of 187,504 acres in the area of Unclassed Forests. At the end of the year the area of forests under the Forest Department stood as follows:—

	Acres.
Reserved Forests	1,480,929
Protected „	3,128,081
Unclassed „	1,447,954
Total ...	6,056,964

Demarcation.

397. Seventeen new masonry pillars were built and 291 old ones repaired. The total expenditure was Rs. 2,947 as compared with Rs. 4,426 in 1900-01.

Surveys.

398. The Imperial Forest Survey Branch worked in the State Forests of Jubbal and Taroch and 100 square miles were surveyed on a scale of 4" to 1 mile.

Working Plans.

399. The provisions of existing Working Plans have been acted up to with some slight exceptions. The Working Plan for the Montgomery Forests was completed and submitted for sanction during the year. Subsequently orders of Government were received that several of the Unclassed Forests included in the Plan would be required for cultivation. Under these circumstances the Plan has been abandoned. The revised Working Plans for Murree-Kahúta and Pángi were sanctioned. Fair progress has been made in the preparation of the Kángra Working Plan, and it is expected that it will be possible to submit it for orders during the rains of 1903-04. A revised Working Plan for Shahdara has been completed and a Working Plan for Pabar Forests is under preparation. The Plan for Taroch prepared in 1900-01 was sanctioned, that for Kot Khái and Kotgúru has been submitted for sanction, and that for Jubbal and Biláspur is in the press. Plans for the States of Balsan, Mailog, Kuthár, Theog, Bhajji and Keonthal are in course of preparation.

General Protection and Breaches of Forest Law.

400. There were 4,086 cases of forest offences, or an increase of 11 over the previous year. The total number of cases taken into Court amounted to 1,213 against 1,354 in the previous year, showing a decrease of 141, chiefly in Kángra, where it is attributed to a more general knowledge of and respect for the Forest Rules. Convictions were obtained in 960 cases. Under Section 67 of the Forest Act 2,628 cases were compounded for Rs. 9,864-2-5; the average amount per head fell from Rs. 3-13-7 to Rs. 3-12-1, while that per case rose from Rs. 2-3-4 to Rs. 2-4-3.

Fire protection.

401. The year has been somewhat unfavourable for fire protection owing to the want of rain during the cold weather and the early part of the year, but constant showers during March, April, May and June minimised the danger of fire during these months. Two hundred and seventy fires occurred during the year burning 12,291 acres against 101 fires and 5,248 acres in the previous year. The percentage of area burnt to the total area under the Forest Department was 0·2 per cent. as compared with 0·1 per cent. in 1900-01 and 0·2 in 1899-1900.

Regulation of grazing.

402. The areas under the Forest Department which were opened for grazing are as follows:—

Year.	Entirley closed.	Partially closed.	Open.
	Square miles.	Square miles.	Square miles.
1900-01*	640	967	7,913
1901-02	608	1,104	7,752

* Exclusive of Hazára figures transferred to North-West Frontier Province.

Reproduction—Natural and Artificial.

403. The year has been a bad one for natural reproduction with most species. The seed crop of all conifers has been very poor in all Divisions and the scanty snowfall in the hills has also helped to make natural reproduction a failure. The bamboo shoot regeneration in the Kángra Division was good in the clump cleared areas. Coppice reproduction both in Shahdara and Chánga Mánga Plantations was very good on the whole. The year was also most unfavourable for works of artificial reproduction, and heavy failures occurred amongst deodár plants up to 4 and 5 years old, and there was a general want of success in planting and sowing works. Planting work in Chánga Mánga has, however, given good results.

Experiments.

404. Exotic pines show no tendency to improve. The cluster pine still does well in Chamba, but has failed completely in Bashahr. Sowings of Podophyllum emodi are doing well in Ráwalpindi and Chamba, whilst the cultivation from the Rhizomes has failed in Chamba. Spanish chestnut continues to succeed in Kulu and Bashahr, and its cultivation is being extended. The China oaks in the Simla Municipal Forest are not doing well. Of 450 plants put out in 1898-99 only 117 are now alive, and of these only 45 are healthy and promising.

Outturn of Forest Produce.

405. The following statement gives a summary of the produce removed from the forests during the year under report :—

Agency.	Timber.	Fuel.	Bamboos.	Grass and grazing.	Minor produce.
	Cubic Feet.	Cubic Feet, solid.	No.	Rs.	Rs.
Government	1,180,640	4,222,705	914,754	144	27,769
Purchasers	919,784	1,054,522	30,065	1,47,064	14,788
Free grants	15,950	112,096	...	1,278	...
Right-holders	1,322,925	33,223,011	120	2,93,704	47,026
Total	3,439,299	38,612,334	974,939	4,42,190	89,574
Total for 1900-01, exclusive of the Hazára Division transferred to North-West Frontier Province.	3,002,270	38,133,091	458,926	4,45,331	88,611

The outturn of timber and fuel shows an increase of about 4 lakhs and 5 lakhs cubic feet as compared with the previous year, and 5 lakhs of bamboos were extracted in excess of the number removed last year.

Financial Results.

406. The following statement compares the financial results of the year as compared with those of the two preceding years :—

Year.	Including local revenue and expenditure of Hazara.			Excluding local revenue and expenditure of Hazara.			After adjustment of accounts with Hazara.		
	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1899-1900	14,05,538	12,00,459	2,05,079	13,68,901	11,56,523	2,12,378	13,41,818	11,5[illegible],202	1,91,616
1900-01	12,77,169	8,20,753	4,56,416	12,44,112	7,76,433	4,67,679	11,91,397	7,68,256	4,23,041
1901-02	15,16,936	9,51,266	5,65,670	15,05,953	9,34,275	5,71,677	14,60,452	9,27,760	5,32,693

Excluding the local revenue and expenditure of the Hazára Division, there is an increase of Rs. 2,61,840 under revenue and of Rs. 1,57,842 under expenditure, and the surplus for the year is Rs. 5,71,677, or Rs. 1,03,998 more than in the

previous year. The increase of revenue was mainly owing to larger sales of departmental timber and fuel and resin products in the Kángra Division. The increased expenditure was due to larger quantities of timber and fuel extracted by departmental agency and to the payment during the year of half the lease money for 1900-01 due to the Rájas of Bashahr and Chamba.

ARBORICULTURE.

Period reviewed.

407. The following account of arboricultural operations relates to the period of three years from 1899-1900 to 1901-02 and compares the results with those of the corresponding previous period, excluding the figures for the District and Provincial Divisions transferred to the North-West Frontier Province.

Avenues.

408. District avenues were extended by 288 miles as compared with 274 miles during the triennial period ending 1898-99, and the total length of avenues fully stocked at the end of 1901-02 was 7,230 miles against 6,921 miles at end of 1898-99. Under the canal avenues there was an addition of 525 miles as compared with 585 during the last triennial period, the total length stocked at the end of 1901-02 being 4,106 miles against 3,581 miles at the end of 1898-99. There was a net increase of 63 miles in the Provincial avenues as compared with 21 miles during the previous triennial period, the total length stocked at the close of the year being 875 miles against 813 miles at the close of the year 1898-99.

Groves, Plantations and Nurseries.

409. The following statement shows the area of groves, plantations and nurseries *in acres* :—

		At commencement of the triennial period	Planted, etc., during the period.	Failure, etc., during the period.	Stocked at end of the triennial period.
Districts	Groves	5,015	1,123	628	5,510
	Plantations	2,601	2,123	395	4,329
	Nurseries	494	42	135	401
Canals	Groves	...	...	...	...
	Plantations	18,745	4,924	3,593	20,076
	Nurseries	52	207	183	76
Provincial Roads.	Groves	1,013	52	91	974
	Plantations	1	93	10	84
	Nurseries	11	6	7	10

Cost of Arboriculture

410. The following statement shows the financial results of the triennial period :—

	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
Districts	5,21,649	6,82,797	...	1,61,177
Canals	2,21,713	4,21,540	...	1,99,827
Provincial Roads	84,243	59,343	24,900	...
Total	8,27,576	11,63,680	...	3,36,104

This income and expenditure is included in the financial statements of the respective departments. Compared with the figures of the previous triennial period, there has been a decrease of Rs. 23,773 in the revenue and an increase of Rs. 53,853 in expenditure.

Mines and Quarries.

Gold. 411. In the Jhelum District 198·5 oz. of gold were produced during the year. Ambála, Hoshiárpur and Ráwalpindi also produced gold in very small quantities.

Iron. 412. The amount of iron ore produced in the Simla District was small, being 4 tons only.

Oil. 413. The petroleum wells in the Ráwalpindi and Bannu Districts yielded 1,874 gallons of oil.

Coal. 414. At the Dandot Colliery in the Jhelum District, which is worked by the North-Western Railway, 67,730 tons of coal were produced during the calendar year 1901 as against 74,083 tons and 81,219 tons in the two previous years. The decrease is due partly to the flooding of one mine and partly to scarcity of labour. The gross profit of the colliery from the commencement of the operations to 31st December 1901 amounted to Rs. 11,25,927; of this Rs. 3,51,316 have been transferred to reduce the Block Account to a sum which would represent the actual value which the plant would realize at any time; Rs. 3,94,684 to wipe off loss on the Baghanwála Colliery; and the balance, Rs. 3,79,927, plus Rs. 72,139, cost of the Branch Line, Khewra to Dandot, having been transferred from Dandot Colliery to the Capital Account of the North-Western Railway, is credited to the Block Account. Thus the Block Account at the end of the half year has a credit balance of Rs. 3,47,216.

Exploring licenses. 415. Licenses for exploring and prospecting for minerals in the Kulu Sub-Division were granted during the year.

Manufactures.

Monographs. 416. Monographs dealing with the principal industries of the Province have been compiled at various dates since 1884. The list of these compilations is as follows:—

Monograph.	*Year of publication.*
Woollen Manufactures	1885
Silk Industry	1887
Ditto, revised	1899
Brass and Copper	1888
Cotton Manufactures	1884
Wood ditto	1889
Gold and Silver Work	1890
Fibrous Manufactures	1891
Pottery and Glass Industries	1892
Leather Industry	1893
Ivory Carving	1900

Census Figures.

Total Artizans. 417. At the recent census 19·37 per cent. of the population, as compared with 21·7 per cent. in 1891, were returned as employed in the "preparation and supply of material substances." In other words nearly one-fifth of the population is of the artizan class, the percentage engaged in agriculture being 58·05. The apparent decrease in the proportion of artizans is largely due to the inclusion of shop-keepers and grain-dealers in this class in 1891. They have in the present census been enumerated under "Commerce."

Classes of Artizans.

418. The detailed figures for certain important classes of artizans given in the margin are of interest. It is noticeable that goldsmiths have apparently decreased by more than one-fifth, but the decrease does not seem to be real, many more dealers in gold and silver and wire-drawers having been returned than in 1891. How far this difference in the returns represents a tendency to specialize in different branches of the trade, it is difficult to say, but the figures for the four wealthy districts given in the margin indicate a tendency for the trade in the precious metals to centralize in Amritsar and Ludhiána, and to decay in the neighbouring districts. The uncertainty in the relative value of the precious metals has not been favourable to the petty *sunár* in out-lying tracts, remote from the great marts, and the wealthier members of the trade appear to have found it profitable to migrate to the markets on the line of rail.

Occupation.	Total. 1901.	Total. 1891.	Increase or decrease per cent.
Masons and builders ...	109,808	96,977	+ 13·3
Carpenters and blacksmiths.	652,585	573,403	+ 15·5
Goldsmiths	126,196	159,346	− 20·8
Leather-workers ...	767,795	688,656	+ 11·5
Potters ...	281,526	269,756	+ 4·5
Tailors, etc.* ...	145,961	136,721	+ 6·7
Woollen-industries ...	38,086	32,057	+ 18·8
Cotton-weavers ...	914,797	1,067,451	− 14·3

* Excluding dealers in piece-goods.

	1901.	1891.
Amritsar.		
Goldsmiths	118	9,255
Gold and silver dealers.	7,122	56
Gold wire-drawers	4,779	293
Total ...	12,019	9,604
Ludhiána.		
Goldsmiths	2,502	5,349
Dealers	2,975	...
Hoshiárpur.		
Goldsmiths	3,295	7,161
Wire-drawers	3,021	11
Gurdáspur.		
Goldsmiths	3,806	5,684
Wire-drawers	2,529	118

Cotton-weaving.

419. Cotton-weaving now gives employment or support for less than a million souls all told, in spite of a remarkable increase in Jhang, and a substantial increase in the numbers returned in Muzaffargarh, while the two great centres, Gujrát and Ludhiána, appear to have suffered materially from the competition of imported piece-goods.

District.	1901.	1891.
Jhang	24,409	...
Muzaffargarh	14,163	12,373
Guirát	32,154	41,989
Ludhiána	19,914	27,721

Woollen Industries.

420. Woollen industries, on the other hand, show a remarkable development, the districts favourably situated for the supply of wool showing most increase. Two or three carpet factories have been started at Batála in Gurdáspur, and the trade in Amritsar is flourishing. On the other hand, this industry has almost disappeared in most of the districts in which it was carried on on a small scale.

District.	1901.	1891.
Amritsar	10 074	5,522
Gurdáspur	4,388	3,310
Delhi	614	992
Karnál	1,274	1,929
Ambala	158	1,062
Jullundur	72	331
Jhelum	929	1,216
Hazára	1,094	1,688

Miscellaneous.

421. In the class 'Supplementary requirements,' there has been a marked increase from 56,590 persons to 226,098, owing chiefly to the inclusion of a new group, 'Plough and other agricultural implement-makers,' which is very numerous, amounting to 140,025 souls.

The Organization of Industry.

422. The following extracts from the recently issued Punjab Census Report by Mr. H. A. Rose, I. C. S., contain some interesting conclusions formed by that officer on the subject of industries in villages and in towns:—

Under the old social system of these Provinces every tract, and to a certain extent, every village, was a self-contained economic unit in which were produced the simple manufactures required by the community. This system facilitated the development of a caste system based on hereditary occupation.

* * * * * * * *

Each tribe, at least, if not each village, was, economically, a watertight compartment, self-contained and independent of the outside world for the necessaries of life, but for commodities not obtainable within its own borders it depended on foreign sources of supply and on the outside castes, such as the Lubánás, or salt-traders, who formed no part of the tribal or village community. Thus there have never arisen, in this part of India, any great industries. Foreign trade, necessarily confined to the few large towns, was limited to superfluities or luxuries, and such industries as existed were necessarily on a small scale. Further, inasmuch as each community was absolutely independent as far as necessaries were concerned, the few industries which supplied luxuries never became firmly rooted and have succumbed at the first breath of competition. Everywhere in our official literature one reads of struggling industries in the small towns, though fostered by intermittent official encouragement, dying of inanition. The causes seem obvious enough. Everything essential can be, and for the most is, made in the village or locality, so that there never is a demand for imported articles of ordinary make, those made by the village artizans, however inferior in quality, satisfying all requirements. In good seasons there is some demand for articles of a better class, but when times are bad that demand ceases, and the industry languishes. Thus the village industries alone are firmly established. If the crop is short, every one from the landlord to the Chúhra receives a diminished share, but small as the share may be it is always forthcoming, whereas in the towns the artizan is the first to suffer in times of scarcity, and if the scarcity is prolonged the urban industries are extinguished. But if, on the one hand, these industries are precarious, the village industries are firmly established and will probably die hard in the face of the increasing competition which menaces them. Before touching on this point, I may note briefly another result of the weakness of the industrial position in the towns.

The system of advances.—In the villages the artizans and menials are by custom share-holders in the community, in spite of their dependence on the land-holding tribes, but in the towns the artizan classes are entirely dependent on the capitalist classes without a customary right to share in the trade profits as compensation, and this unsatisfactory condition of things arises out of the system of advances to operatives which prevails on a very large scale, and especially in the cities. This system appears to be, generally, as old as the industries themselves, and it has grown with their growth until it has become a serious menace to their progress. Thus in the case of the carpet-weaving and several other industries at Amritsar, it is said that each master artizan, who has workmen under him, owes Rs 300 to Rs. 1,000 to his employer. This debt is called balance or *báqi* and when an artizan leaves one employer for another, the latter must, by the custom of the trade, refund the outstanding advance to the former and thus himself become the artizan's creditor. In addition to this outstanding *báqi*, other advances are from time to time made to the artizan. These are called *kharch*, and money due for work done is credited to this *kharch*, anything over and above the sum advanced being credited to the *báqi*, though in practice it is alleged by the capitalists themselves that on the *kharch* account the balance is usually against the workman, whose *báqi* consequently is constantly increasing. It is admitted that the *báqi* constitutes an irredeemable debt, which the workman can never hope to liquidate and which thus renders him liable for life-long service to the capitalist, although interest is not charged on the amount outstanding. The system then precludes any attempt on the part of the operatives to improve their skill or efficiency, for increased earnings would merely go to liquidate the *báqi*. It is small wonder if under this system several minor industries have decayed.

The present condition of village industries.—Bearing in mind that the only industries carried on in villages are those which supply the barest necessities in the way of agricultural implements, household utensils and clothing, all of rough, though serviceable quality, it may be said that they have as yet been little affected by the establishment of factories or by foreign competition.

Cloth-making.—The branch of industry chiefly affected is that of cotton-ginning, numerous factories having been erected of late years. Thus at the close of 1900 there were 132 factories (within the scope of the Factories Act) in these Provinces, of which 76 were cotton-ginning, cleaning, or pressing factories, and 5 were cotton-spinning, etc., mills. Nevertheless, the general opinion is that the manufacture of country cloth in

villages has not yet been seriously affected because hand-made cloth is both cheaper and more durable than the machine-made article, in which the fibre is damaged in the process of manufacture. Indeed, there is still a considerable export of country cloth from Tahsíl Pind Dádan Khan in Jhelum to the frontier districts and Kashmír: and from Siálkot to those districts, the North-Western Provinces and even to Bengal; and in these districts at least the industry is holding its own. Generally speaking, the use of imported piece-goods is confined to the towns, and to the better classes among the villagers, but at most some 5 per cent. of the total population appear to use imported cloth.

There is, however, a tendency to centralize the manufacture of cloth in the towns, machine-made thread being used and the cloth made by weavers employed by capitalists, but so far this system has met with slight success. Indeed in Khánpur in the Hoshiárpur District the tendency is for the industry to leave the town and become scattered in the neighbouring villages.

The use of machine-made thread is, it may be noted, sufficiently extensive to seriously diminish the amount which women can earn by spinning, an industry on which many of them, among the poorer classes, are virtually dependent.

Sugar-making.—The old wooden presses, each requiring nine men and four bullocks to keep it going, have been mostly replaced by the iron presses, made chiefly at Náhan, which can be worked by two men and a single bullock. The iron press is said to turn out black sugar with a flavour of machine oil, and it injures the fibre of the canes so much that they cannot be used for mats, ropes, etc., as they used to be, but, in spite of these drawbacks, the cheapness of the new machines has undoubtedly saved sugar making from extinction as a village industry. Imported sugar has indeed largely replaced the country-made article, although it is objected that the former contains bone-dust and at a recent fair in Rohtak the confectioners who used European sugar were turned out by the people.

The industrial future.—Thus in competition with village industries the factory-system is at present making but little head-way, and other causes operate against its rapid development. Capital has hitherto found a more profitable, or a more tempting, investment in exploiting the agriculturist and the result has been to divert capital from its natural field, the development of staple industries. The absence of technical skill, which can only be acquired by technical education, also appears to be a serious obstacle, and attempts on the part of native capitalists to employ European skilled labour have not met with much success, owing to our national failing. It is indeed significant that nearly all the machinery of the mills run by native capital is in the charge of half-trained native workmen, who are found to be, in the long run, more efficient than trained European mechanics. On the other hand, the inherent incapacity to combine for a common object, characteristic of native society, has rendered the Joint-Stock Company system less successful than it might have been, and success is only assured in cases where the company consists of men of the same caste or rather of the same section of a caste. Of this there is an excellent illustration at Amritsar in the Piece-goods Market recently constructed by a syndicate, whose members are almost exclusively Baniás of the Nauria *gót*, and it may be conjectured that in the future the Joint-Stock Company system will to a great extent be grafted on to the caste organization. Nevertheless, within certain limits, considerable powers of organization and combination have been displayed and the management of many large native concerns contrasts favourably with that of European firms. It may then be anticipated with some confidence that industrial development will progress slowly on characteristic lines to the eventual exclusion of European capital and personnel. With improved technical instruction and the setting free of capital for its legitimate functions, it seems inevitable that industries will be concentrated more and more in the large towns and cities, but the process is not likely to be rapid.

FACTORY ACT.

Number of Factories.

423. The report on the working of the Factories Act in the Punjab during the year 1901 shows that there were in that year 152 factories worked wholly or partly by steam power. Twenty-eight new factories were brought on the register and 8 were struck off. The health and wage conditions of the operatives was generally reported to have been good. There were 115 accidents during the year, of which 7 proved fatal and 15 were serious.

Classes of Factories.

424. Of the 152 factories 93 are cotton-ginning and pressing factories, and 5 are cotton-spinning and weaving mills. The working of these cotton factories depends on the supply of cotton obtainable, and they are in consequence often closed for a large part of the year. It is reported that the cotton-ginning factories in the Lahore District also undertake the compressing of fodder. Two of the Lahore cotton factories have applied for patents in

connection with an attachment to a pressing-machine whereby a bale of compressed fodder is cut into convenient lengths by machinery instead of by a hand-saw. In the Mela Rám Cotton Mills Factory, Lahore, both the Mill Manager and the Engineer are Europeans and certificated men. Some of the private factories in this city employ trained Pársís as Engineers, but it is reported that most of the private factories there employ mere Mistrís as Engineers, who have the control of boilers and prime-movers. During the year an Act to provide for the inspection of Steam-Boilers and Prime-Movers was passed by the Provincial Legislative Council (Punjab Act II of 1902).

Trade.

Total trade of the year.

425. The total trade in all articles, exclusive of animals and treasure, for the last three years is shown in the table given below:—

		Imports.			Exports.		
		By rail.	By river.	Total.	By rail.	By river.	Total.
1899-1900	Weight, in maunds	19,919,199	146,100	20,065,299	20,364,616	1,339,486	21,704,102
	Value, in rupees ...	12,65,40,348	10,06,603	12,76,46,951	11,63,73,967	49,52,470	12,13,26,437
1900-01 ...	Weight, in maunds	16,771,088	172,064	16,943,152	15,131,419	834,807	15,966,226
	Value, in rupees ...	12,81,77,559	10,49,245	12,92,26,804	9,67,45,140	32,18,274	9,99,63,414
1901-02 ...	Weight, in maunds	20,122,123	183,010	20,305,133	36,667,658	1,719,750	38,387,408
	Value, in rupees ...	15,37,09,039	10,94,584	15,48,03,623	15,02,61,891	49,28,510	15,51,90,401

Since 1897 the value of imports has kept consistently near the figure of 12½ crores: the present returns show 15½ crores, or an actual increase over last year's figures of some 2½ crores. Similarly, with exports the returns show a total value of 15½ crores as against nearly 10 crores recorded last year.

The most obvious factor in this all-round rise has been the return of agricultural prosperity during the year under report and the consequent impetus given to almost all branches of internal trade. In this connection the table given below is interesting as showing the comparative movements of food-grains during the last three years:—

Grain and Pulse excluding river-borne trade.

Year.	Imports.		Exports.	
	Quantity, in maunds.	Value, in rupees.	Quantity, in maunds.	Value, in rupees.
1899-1900	6,341,656	1,69,13,158	9,082,533	2,72,70,746
1900-01	4,013,354	1,33,46,195	8,204,893	2,60,36,050
1901-02	1,415,916	45,84,943	23,681,644	6,06,41,377

426. River-borne trade maintains its position with a little to spare so far as imports are concerned. Exports rise again to much about the figure of 1899-1900, which seems to indicate that the depression observable last year has largely passed away. This depression was then attibuted to the prevalence of plague as well as to the unfavourable season, but in view of the greater spread of plague during the year under report, it would seem that the results observed should be assigned mainly to the latter phenomenon. The table given below shows at a glance the progress of river traffic during the last five years:— River-borne trade.

Year.	Imports.		Exports	
	Quantity, in maunds.	Value, in rupees.	Quantity, in maunds.	Value, in rupees.
1897-98	149,151	9,48,106	1,055,297	40,32,578
1898-99	110,814	8,44,077	1,758,575	50,75,847
1899-1900	146,100	10,05,603	1,339,486	49,52,470
1900-01	172,064	10,49,245	834,807	32,18,274
1901-02	183,010	10,94,584	1,719,750	4,928,510

427. Cotton piece-goods (European) have recovered somewhat from the depression which marked last year's returns, and the trade under this head is the chief contributor, with over 63 lakhs, to the total rise above recorded. A further increase of 40 lakhs in Indian piece-goods is evidence that the recovery of the trade in the European variety has not been at the expense of the locally manufactured article: in fact, the series of bad years does not appear to have appreciably interfered with the increasing demand for the home produce. Other items which show an increase of between 20 and 30 lakhs are sugar (refined and raw), coal and coke, iron and steel, gunny-bags, and gur. The increases in the import of spirits and ale and beer are 4 lakhs and 2 lakhs, respectively, the rise being equal in each case to that recorded last year. The only appreciable decreases in imports are, as might be expected, under the head of food-grains and pulse, the total falling not much short of a crore in value. Imports.

428. The export of wheat has gone up by 2½ crores, mustard and rape by over 2 crores, and gram and pulse by over 1 crore, other oilseeds by 47 lakhs and raw cotton by 21 lakhs. Other increases are insigificant. Decreases are exhibited under *jowár* and *bájra* to the extent of nearly 30 lakhs, and (a satisfactory feature) the export of hides drops still further by 27 lakhs. The decline of *jowár* and *bájra* is the natural reaction after the abnormal exports of this class of grain to Bombay and the United Provinces during the previous triennium. In the case of Bombay, as is explained below, the export trade generally appears to be re-adjusting itself to the resumption of more normal agricultural conditions. Exports.

429. The import trade into the Punjab has passed more than ever through Karáchi during the year under report, the percentages being 30 for 1900-01 and 34 for 1901-02: a corresponding drop is to be noticed in the percentage enjoyed by the United Provinces, the figures being 29 in 1900-01 and 25 in 1901-02. The figures for other importing centres show no variation worth remark. A similar tendency is observable in the percentages for export trade, Karáchi absorbing 39 per cent. this year as against 26 in 1900-01; but in this case the corresponding decrease exhibited by other centres is shared by the United Provinces with a drop from 24 to 18, and by Rájpútána and Central India which declines from 15 to 9. Bombay Port shows signs of recovering her normal share of 15 per cent. by taking 13 per cent. this year as against 9 in 1900-01. Distribution of trade.

TRADE WITH TRANS-FRONTIER COUNTRIES.

Trade with Kabul.

430. Owing to the exclusion from the returns of the registering posts now included in the North-West Frontier Province, any useful comparison of the *total* trade of the year with that of preceding years is impracticable. The trade with Kábul is now limited to that registered at the single post of Khar in the Dera Gházi Khan District. The only noticeable imports, *ghi* and almonds and raisins, continue to show a steady increase. In the case of *ghi* this appears to be due to the low price of that commodity in Khorásán; it is alleged by traders that there is a prospect of the import of *ghi* expanding. It is said, moreover, that the new Amír is proposing to reduce or abolish the export duties which have hitherto acted as a check upon freedom of trade with Afghánistán. The continued decline in exports is ascribed to the waning popularity of the route *viâ* Khar in face of the opening out of the Chuhar Khel-Dhana route through Dera Ismail Khan.

Kashmir trade.

431. The prevalence of plague in Jammu and in the bordering districts of Gurdáspur, Siálkot and Gujrát has resulted in a considerable dislocation of trade with Kashmir. The effect is seen chiefly in the decline in value of imports for the year, while the return of good harvests to the Punjab has contributed in a marked degree to this decrease by checking the import of food-grains produced in the autumn crop. Ráwalpindi and Jhelum continue to show steady increases both on the side of import and export. Of the plague-infected districts, Siálkot exhibits a large increase in rail-borne exports and an appreciable decrease in the same class of imports. In Gurdáspur imports fell noticeably, but exports do not show a very remarkable decrease; the effect of the prevalence of plague in this district was to divert the stream of traffic from the infected routes *viâ* Sukho Chak and Dandot in Tahsíl Shakargarh to those of Basauli and Narot in Tahsíl Pathánkot, where plague did not make its appearance until just at the close of the period now under review. The Gujrát returns under both heads are marked by a considerable decrease, which is attributed by the Deputy Commissioner partly to plague, partly to the return of agricultural prosperity, and partly to the unreliable nature of the figures supplied. Taking the Kashmir trade as a whole, imports drop over 13 lakhs of rupees in value, while exports increase by 7 lakhs. The import of cattle, with the exception of horses, has risen owing to a favourable season having kept the passes open for a longer period than usual. The fluctuation in the import of food-grains has already been noticed; the only other items calling for remark are *ghi*, the import of which has dropped by one-half, oilseeds, in which a brisk rise is reported, and timber, which displays a further unexplained decrease of 33 per cent. Of exports, the only noticeable rises occur in manufactured cotton, indigo, salt, sugar, and spices, while falls are recorded in piece-goods (Indian), all food-grains, brass and copper, iron, and tobacco.

Ladakh trade.

432. The returns show a marked revival of trade with Ladákh. There has been a 70 per cent. rise in the weight of the *charas* imported and more than 100 per cent. rise in the value. When, in September last, the passes became practicable and the importing season commenced, the stock of *charas* in the Hoshiárpur warehouse, which is the great distributing centre, had run very low: the demand thus produced the supply which is indicated by the figures. It would therefore be incorrect to anticipate with any confidence that the upward movement will be sustained. The rise in imports re-acted upon the export trade and shows itself in the increased figures for European piece-goods and food-grains taken back by the returning traders.

Chinese-Tibet. trade.

433. There has been a slight rise in the weight and value of imports from Tibet, due to an increase in the amount of raw wool imported, and a slight fall in the value, though not in the weight, of exports. This is accounted for by an increased demand for food-grains for export and a corresponding drop in the amount of piece-goods.

JOINT STOCK COMPANIES.

Number of Companies.

434. There is a net increase of 1 in the number of companies limited by shares, 51 being in existence at the close of the year 1901-02, compared with 50 at the end of the preceding year. Four companies ceased to work during the year and 5 new companies were registered.

Increase in Capital.

435. The increase in nominal capital was Rs. 6,70,000 and the increase in paid-up capital Rs. 8,90,000. None of the companies reduced their capital, while 28 increased their capital, the increase in all but two cases being in paid-up capital. In 17 cases the increase was petty. The most notable increase was made by the Murree Brewery Company, Limited, which increased its nominal capital by Rs. 6,00,000 and its paid-up capital by a similar amount, as the new shares were very quickly taken up.

New Companies registered.

436. The nominal capital of the 5 companies registered during the year is Rs. 8,20,000, but only Rs. 6,410 were paid-up before year closed. One of these companies is a Bank, and the others are companies having for their objects (1) the manufacture of matches, (2) printing, (3) general trading and commission agency, and (4) the export of hides and leather, &c., from India to Europe.

Companies in Liquidation.

437. The companies which went into liquidation during the year were—

(1) The Metal and Wood Work Company, Limited (Delhi);

(2) The Army Fodder and Forage Supply Company, Limited (Simla);

(3) The Punjab Silk Mills Company Limited (Delhi); and

(4) The Biscuit Manufacturing and General Steam Bakery Company, Limited (Delhi).

The first and the last were wound up by order of Court. The remaining companies are ones which have long since ceased doing business, and which are still shown in the books because they have not filed final returns.

Paid-up Capital of the Companies.

438. The aggregate paid-up capital of the 51 companies in the Province is nearly exactly half of the aggregate nominal capital, the latter being Rs. 1,58,96,000 and the former being Rs. 79,34,487. The average paid-up capital of companies is therefore Rs. 1,55,578.

The companies which have their capital fully paid up are:—

(1) The Alliance Bank of Simla, Limited (Rs. 10,00,000);

(2) The Imperial Carrying Company, Limited, Ráwalpindi (Rs. 4,00,000);

(3) Delhi Cotton Mills Company, Limited (Rs. 5,00,000);

(4) The Krishn Mills Company, Limited, Delhi (Rs. 7,00,000 nearly);

(5) The Bhiwáni Press Company, Limited (Rs. 61,000);

(6) The Pánipat Press Company, Limited, (Rs. 70,000);

(7) The Hindu Cotton Press Company, Limited, Ambala (Rs. 50,000);

(8) The Sri Guru Nának Company, Limited, Mooltan (Rs. 2,00,000 nearly);

(9) The Delhi Cloth and General Mills Company, Limited (Rs. 7,00,000);

(10) The Ganesh Flour Mills Company, Limited, Delhi (Rs. 4,00,000);

(11) The Kángra Valley Slate Company, Limited (Rs. 1,20,000); and

(12) The Murree Brewery Company, Limited (Rs. 18,00,000 nearly).

Capital how invested.

439. The above details show that these 12 companies represent Rs. 60,00,000 of paid-up capital between them, leaving less than Rs. 20,00,000 of paid-up capital amongst the remaining 39 companies. The distribution of the aggregate paid-up capital in the principal classes of Joint Stock enterprise is as follows:—

(1) Under Banks and Insurance Companies, Rs. 14,97,885, of which Rs. 10,00,000 belong to the Alliance Bank of Simla, Limited.

(2) Under Trading Companies, Rs. 5,53,015, of which Rs. 4,00,000 belong to the Imperial Carrying Company, Limited, Ráwalpindi.

(3) Under Mills and Presses of all kinds, Rs. 39,03,795, the capital being distributed mainly between Mills at Delhi, Labore, Amritsar, and Mooltan.

(4) Under Mining and Quarrying, Rs. 1,20,000.

(5) Under Ice Manufacture, Rs. 62,792.

(6) Under Breweries, Rs. 17,97,000.

Of the companies shown as trading companies only—

(1) The Imperial Carrying Company, Limited (Ráwalpindi);

(2) The Moslem Trading Company, Limited (Mooltan ; and

(3) The Commercial East India Agency Company, Limited (Lahore),

can properly aspire to be called real trading companies. The remaining companies have for their objects specific manufacture such as hosiery, glass, and matches, &c., &c. Of the Mills, 7 are mills for ginning and weaving cotton and wool, 5 are for pressing cotton and similar material, and the remainder are cloth mills, flour mills and oil mills, &c., there being 1 iron mill for rolling scrap iron into bars and beams, &c.

Fees realised.

440. The total amount of registration fees realised during the year was Rs 1,911 compared with Rs. 1,990 in the previous year.

Public Works.

ADMINISTRATION.

Transfers to Military Works.

441. Consequent upon the formation of the North-West Frontier Province, the accounts of the Hazára, Kohát and Dera Ismail Khan Public Works Department Provincial Divisions were transferred to the Examiner of Accounts, Military Works Services, from the 1st November 1901. The establishments attached to these divisions were temporarily lent to the Director-General of Military Works to assist in carrying on works until he could replace them by men of his own Branch. The transfer was effected without check to progress of works. All the military buildings and roads in the Jhelum Cantonment were also transferred to the Military Works Services on the 1st April 1901.

Viceregal Estates.

442. During October 1901 the maintenance and repairs of the Viceregal Lodge and Staff Houses at Simla, with the exception of the water-supply and electric light, were transferred to the charge of a newly appointed Superintendent of the Viceregal Estates, under the immediate control of the Military Secretary to His Excellency the Viceroy: the Public Works Department, however, assisting when necessary in obtaining labour and materials, in the arrangements and supervision of contracts, and in other professional matters.

Internal transfers.

443. In January 1902 the Gujránwála Division, comprising the districts of Siálkot, Jhang, including the Chenab Canal Colony, Gujránwála, and Gujrát (now known as the Lyallpur Division), was transferrred from the 3rd to the 1st Circle, and on 1st February 1902 a new division was formed at Shahpur, to include Miánwáli, with its necessary works, as the head-quarters of a new

district, and Sargoda, the head-quarters of the Jhelum Canal Colony. On the 16th February 1902 the districts of Ludhiána and Hoshiárpur were transferred from the 2nd to the 3rd Circle.

FAMINE RELIEF WORKS.

Hissar.

444. Test works were started on certain tanks in the Hissar District, but after being kept open for a couple of months were closed by order of the Commissioner, Delhi Division.

Relief Programmes.

445. During the year considerable progress was made in the preparation of famine projects. Many surveys and estimates for impounding reservoirs in the Gurgaon District and projects for tanks in the Hissar and Rohtak Districts were made. The total estimated cost of projects now on record in the 2nd Circle of Superintendence amounts to about one crore of rupees, so that an ample programme, in case of severe famine, is now ready.

MILITARY WORKS.

446. A residence for the Registration Officer of Service Grantee Camels was built at Lyallpur, where an officer of the Supply and Transport Corps is now stationed.

The Sarágarhi Memorial at Amritsar, erected to commemorate the defence of the post of Sarágarhi in the Samána by men of the 36th Sikhs in 1897, was also completed.

The Library for the United Service Institution at Simla, and the construction of a third masonry reservoir for improving the water-supply of the Lawrence Military Asylum, Sanáwar, were in progress.

IMPERIAL CIVIL WORKS.

Imperial Civil Secretariat.

447. In the 2nd Circle the following important works were in progress:— The remaining work of cutting down the plateau at the "Gorton Castle" site at Simla was carried out, and a handsome design for the new Imperial Civil Secretariat Offices to be built thereon was prepared by Colonel Sir S. S. Jacob of Jaipur. The design was, however, found to be costly, and took up too much space, so it was modified under instructions from His Excellency the Viceroy and the Supreme Government, and a project for a commodious building of three storeys, to be built of solid masonry throughout, was submitted for sanction to the Government of India. The total cost of the work is estimated at Rs. 8,57,930, exclutive of the usual departmental charges. Construction work and collection of materials was commenced in October 1901, and expenditure to the end of March 1902 was Rs. 2,90,495. It is expected that the building will be ready for occupation by March 1904.

Viceregal Lodge.

448. The old boilers of the electric light installation at Viceregal Lodge, Simla, were found to be so defective, owing to age, wear and tear, that it was considered unsafe to work them any longer at the pressure which was required for the new dynamos and engines provided last year. An estimate, amounting to Rs. 24,173, was accordingly prepared and sanctioned for providing two Babcock and Wilcox's boilers of the latest and most improved pattern. These were installed by Messrs. Simpson and Company, and are guaranteed to work at a safe pressure of 90 lbs. Each boiler is capable of doing the full duty required when the full load of lights are used on State occasions.

Simla residences for Members of Council.

449. That fine estate at Simla, known as "Craig Dhu," was purchased for Rs. 60,000 as an official residence for the Public Works Member of His Excellency the Viceroy's Council, and an outlay of Rs. 10,198 was further incurred in making certain alterations and improvements to it. The "Mythe" estate at Simla was also obtained on a long lease by the Supreme Government as a residence for the Military Member of His Excellency's Council. An upper storey has been added, at a cost of Rs. 12,142, which makes a great improvement to the building.

Post Office, Lahore.

450. The administrative sanction of the Supreme Government was accorded to the construction of a new General Post Office at Lahore at a cost of Rs. 2,64,000, and premiated designs were invited for the work. During the year some materials were collected, and trial pits dug to ascertain the nature of the foundations.

Miscellaneous.

451. Besides the forgoing, the following Imperial works were also completed :—Improvements to "Squires Hall," Simla; supplying furniture to "Curzon House," Simla; converting three mullion windows into bow windows in His Excellency the Viceroy's study at Viceregal Lodge, Simla; stallion depôt stables at Mírpur near Abbott-abad; glazing verandahs of the upper floor of "E" class quarters for European clerks at Simla, and sanitary improvements to the native clerks' barracks at Simla. Those in progress were—Acquisition of land on the "Bantony" estate, Simla, for erection thereon of quarters for menials attached to the Telegraph Office; providing main cables for the electric light at "Squires Hall," Simla, and constructing six supply houses and a rest-house on the road through the Khagan Valley to Chilás (transferred to the new Province).

PROVINCIAL CIVIL BUILDINGS.

Ellerslie.

452. The substantial three-storeyed new offices for the Punjab Government at "Ellerslie," Simla, were completed for Rs. 2,90,355. Additional out-office accommodation at "Ellerslie" was also provided at a cost of Rs. 16,701.

Dharmsala Jail.

453. The landslip to the west of the jail at Dharmsála, which gave so much trouble in the previous year, was carefully attended to, and a sum of Rs. 25,912 expended on protective measures, which have, so far, acted well. Further subsidence of the hill-side has practically ceased.

Departmental buildings completed.

454. Other works completed during the year were—

Land Revenue.—A separate room for the Sadr Kánúngo's records in the Deputy Commissioner's Court, Ráwalpindi, and additional rooms in the Tahsíl building at Ráwalpindi.

Excise.—Additions and alterations to the *charas* godown at Hoshiárpur.

Residence for Local Governments.—A new conservatory at "Barnes Court," Simla.

Monuments and Antiquities.—Erection of Her Majesty the late Queen Victoria's statue at "Charing Cross," Lahore, and completing the pierced red sandstone railing round the Emperor Humáyún's tomb at Delhi.

Educational.—Constructing a separate building for use as a Chemical Lecture-room and Laboratory in the Government College, Lahore, and providing gas apparatus in it; also additions and alterations to the Normal School buildings at Mooltan.

Jails.—Improving the ventilation and lighting of the Jhelum Jail Hospital, and providing an iron-barred entrance gateway to the Ferozepore Jail.

Police.—First class police stations at Nisang and Khánwah; second class police station at Sángla in the Chenab Colony, and additions and alterations to officers' quarters in Phillour Fort.

Medical.—Additions and alterations to the Lunatic Asylum, Lahore, and purchase of Mr. Cooper's house at Lahore for conversion into a contagious diseases ward for the Veterinary College.

Miscellaneous.—Purchase of Sir William Rattigan's house, "Roselands," Lahore, for the use of the Educational Department; combined office for the Executive Engineer and Sub-Divisional Officer at Lyallpur; residence for the Assistant Commissioner at Lyallpur; purchase of a house as an official residence for the Deputy Commissioner, Delhi; huts for officers on plague duty in the Gurdáspur District; and a second class civil rest-house at Sonepat.

455. The works in progress were— Works in progress.

Land Revenue.—New Tahsíldár's quarters at Núrpur, Kángra District; protective works for the Deputy Commissioner's Court at Dharmsála; new record-room for the Deputy Commissioner's Court, Jhelum; re-roofing the old *katcheri* building at Sirsa, Hissar District; constructing *tahsíls* and *thánás* at Samundri and Toba Tek Singh; a new treasury at Lyallpur.

Residences for Local Governments.—Constructing a new kitchen, and providing electric light, at "Barnes Court," Simla.

Educational.—New school-room for boys at the Lawrence Military Asylum, Sanáwar.

Law and Justice.—A Divisional Judge's Court at Ambala, and a court-house for the Judge of the Small Cause Court, Amritsar.

Jails.—Constructing a judicial lock-up at Lyallpur; rebuilding the outer wall of Rohtak Jail; extending the Municipal water supply to the Jail and Lunatic Asylum, Delhi; constructing a water-course for the supply of canal water to the Delhi Jail; and converting the Lunatic Asylum, Delhi, into a Reformatory School for the Punjab.

Police.—Police Lines at Lyallpur, and a second class police station at Manánwála in the Chenab Colony.

Medical.—An Ophthalmic Ward in the Mayo Hospital, Lahore, and a small Laboratory, with bath-room, in the Veterinary College, Lahore.

Miscellaneous.—Residence for the District Superintendent of Police at Miánwáli, and a civil rest-house at Ránitál, in the Kángra District.

COMMUNICATIONS.

456. Important improvements were carried out to the Kángra Valley Cart Road, *viz.*, all the lengths remaining unmetalled since last year have been completed, and the road gradients eased at various places. The Bher Khud bridge was commenced, and four spans completed up to spring level of arches. The Bhod Khud bridge, consisting of six spans, was completed up to spring level of arches. On the completion of these bridges there will be a good metalled and bridged road complete from the Chakki River to Pálampur, a distance of 66 miles. The expenditure to end of March was Rs. 1,15,249. Work on the Pálampur-Baijnáth Road was completed, with the exception of the extension to the top of Ghatta Hill. This latter was well in hand, and should be completed by May 1902. The expenditure incurred to the end of the year was Rs. 99,908. Kangra Valley Cart Road.

457. Other works completed were—increasing the width of metal on the Murree-Baracow Road; renewing superstructure of the wooden bridge in mile 16 of the Ráwalpindi-Murree Road; renewing superstructure of the Chattar bridge in mile 19 of the same road; renewing superstructure of three timber bridges on the same road; metalling the feeder road from Thánesar Railway Station to the Grand Trunk Road; a new camel road from Bajaura to the Dulchi Pass along the left bank of the Rupru Khud in the Kulu Valley; realigning the road between Dilasni and Lárji in the Kulu Valley; a new suspension bridge across the Sutlej at Luri; a suspension bridge over the Nogri torrent in mile 66 of the Hindustán-Thibet Road; a dák bungalow at Lyallpur; and a new rest-house for travellers at Luri on the Narkanda-Kulu Road. Other works completed.

458. Works in progress were—bridge over the Dehri stream at Kotla, in mile 29 of the Kángra Valley Cart Road; metalling the feeder road from mile 95, Grand Trunk Road, to the town of Ládwa; a cart-stand at Tret on the Ráwalpindi-Murree Road; metalling the Shahpur-Khusháb Road; improving road from Kumhársain to Luri, and from Narkanda to Kumhársain; a suspension bridge at Rámpur on the Hindustán-Thibet Road; a mule-path and culverts from Kirang Khud at mile 166 of the Hindustán-Thibet Road, to the Pegnigla, Works in progress.

on the borders of the Bashahar State; a new road from Mashobra to Naldera, Naldera to Basantpur, and from Basantpur to Suni bridge; feeder road from Taraki Railway Station to Domeli, and metalling certain portions of the Sheikhupura-Pindi Bhattián Road.

Boat bridges and ferries.

459. Boat bridges were maintained as usual on important trade and military routes. Steam ferry services continued to be worked over the River Indus at Dera Gházi Khan under the management of the North-Western Railway.

Miscellaneous Public Improvements.

Hurdle Dykes at Dera Ghazi Khan.

460. The history of the construction of the hurdle dykes as commenced was given in last year's report. There were to be three spurs or dykes, and at the close of 1900-01 the work was well in hand, but owing to the fact that the water was low, and sand banks had formed, as much progress as wished for could not be made. Had the river risen steadily, as it does ordinarily, the work would have proceeded satisfactorily, but on the 7th and 8th May 1901 the river water suddenly rose to within about six inches of the highest recorded monsoon flood. Such a rise at that time of the year was quite unknown, and occurring as it did when the channels were all congested, the work on the hurdle dykes suffered very considerably, and in fact so much so that the damage done could not be repaired before the river finally rose. A gap had to be left in the upper dyke and the second and third dykes were completed (though the length of the second had to be curtailed). The effects of the gap in the upper dyke were soon felt, as the fast current running through this gap began to damage the second or next dyke. These two dykes subsequently were entirely washed out, but the third stood, and acted admirably, as some ten feet of silt was deposited behind it for nearly its entire length; there was also a fair deposit on the up-stream side. This third dyke began to get damaged during March 1902, and some piles were washed out from near the middle in that month. After the upper and second dykes had been washed out there was excessive erosion, the entire area of land eroded during the year being about 500 acres. The expenditure at the end of the year was Rs. 5,30,697.

Works in progress were—a retired cantonment embankment at Dera Gházi Khan, and earthwork on the Khol bund, in the Gurgaon District.

District and Municipal Works.

District works.

461. The works completed were—a female ward at Lyallpur; a wing in the Karnál High School; metalling 2½ miles of the Dhillonwála-Eminabad Road, in the Gujránwála District; a bridge near Kheru Kulan over the Jumna Canal, in the Delhi District, and a *serái* at Shorkot, Jhang District.

Those in progress were—a *serái* bungalow at Sángla, and a *serái* at Sukheki, in the Gujránwála District.

Municipal works.

462. The works completed during the year were—additions and alterations to the Municipal Board School, Amritsar; a new dispensary at Shahabad, Karnál District, and the Anárkali drainage, Lahore.

Those in progress were—new dispensary at Dájal, in the Dera Gházi Khan District; the Cho protective works at Hoshiárpur; raising the water-works reservoir tanks at Lahore; sinking wells and providing new engines and duplicate boilers in connection with the Lahore water-works, and sinking wells for flushing drains at Kasúr, in the Lahore District.

Maintenance charges.

463. Sixteen miles of the road from Chiniot to Chiniot Road Railway Station were taken over for maintenance on behalf of the District Board.

The total annual amounts granted for maintenance of Provincial properties in charge of Local Bodies during the year were Rs. 61,357 and Rs. 4,191 to District Boards and Municipalities, respectively, supplemented by a grant-in-aid of Rs. 25,850 for their Engineering establishments. The Public Works Department, on the other hand, looked after roads belonging to the District Boards, for which they received an annual grant of Rs. 63,950.

The Public Works Department scrutinized and checked 21 projects, aggregating Rs. 66,068, prepared by District Boards and Municipal Committees, and worked out 44 projects for them, aggregating Rs. 9,61,564.

WORKS CONSTRUCTED BY PUBLIC WORKS DEPARTMENT FROM PRIVATE FUNDS.

Walker Hospital.

464. The Walker Hospital for Europeans at Simla was practically completed. This handsome building, the gift of Mr. James Walker, C.I.E., will prove an inestimable boon to the sick. The main building consists of six sets of quarters for patients, with reading, drawing, dining, operating and store rooms. The outside buildings consist of quarters for nurses, Assistant Surgeons, and servants, also a kitchen, pantry, dead-house, &c. The architectural style of the building is pretty and tasteful; and wide enclosed verandahs both improve its outward appearance and add considerably to the comfort of the occupants.

Other works.

465. The Head Master's quarters at the Aitchison College, Lahore, were completed. Works in progress were—metalling certain streets at Gojra, and pavement in the grain market at Toba Tek Singh, in the Chenab Colony. The bar-room and suitors' shed attached to the District Court at Ludhiána was made over to the District Board for maintenance with effect from the 1st August 1901.

WORKS OF PUBLIC UTILITY CONSTRUCTED BY PRIVATE INDIVIDUALS.

466. The following works of public utility (exceeding Rs. 1,000 in value) were constructed by private individuals from private contributions at a total cost of Rs. 31,486:—

Delhi Division.—A masonry *dharmsála* near Halúwas gate at Bhiwáni by Lachhmi Rám, son of Sri Rám, *Mahájan*, of Bhiwáni, cost Rs. 6,300; a masonry well and a bungalow on the Jhajjar-Rewári Road by Baldeo Sahái, son of Inchha Rám, *Mahájan*, of Jhajjar, cost Rs. 3,000; a temple on the Delhi-Muthra Road by Jahángiri, *Mahájan*, of Palwal, cost Rs. 3,000; a *dharmsála* and a well on the Rewári-Jatusána Road by Badri Parshád, *Mahájan*, of Rewári, cost Rs. 2,000; a *dharmsála* by Sansári Mal, *Mahájan*, of Rewári, cost Rs. 2,000; a *dharmsála*, well and drinking fountain with compound walls, at Náraula, on the Delhi-Gurgaon Road, by Mussammát Bhagwán Devi, widow of Lachman Dás, *Bania*, of Delhi, cost Rs. 4,000; a *dharmsála* and a masonry well on Juán-Chatána village road near Sonepat by Jagan, son of Neki, *Ját*, of Sonepat, cost Rs. 1,200; and a masonry *serái* at Biláspur by Nand Lál and Kirpa Rám, sons of Hazári Mal, *Bania*, of Biláspur, cost Rs. 4,125.

Mooltan Division.—A masonry rest-house for natives at Khairpur, by Tahlia Rám, son of Thakria Rám, Kukrája, of Khairpur, cost Rs. 1,480; a *serái*, together with a well, for use of travellers at the Railway Station, Shujabad, by Naráin Singh and Líla Kishen, sons of *Chaudhri* Khem Singh, Babla, of Shujabad, cost Rs. 4,381.

DAMAGE DONE BY FLOODS AND FIRE.

Cyclonic storm.

467. During the first week in May 1901 an exceptionally severe cyclonic storm occurred. The boat bridge at Kund over the Kábul River was wrecked, chiefly by the wreckage of the Nowshera Railway Department boat bridge being borne down upon it. The boat bridge at Chársadda,

in the Pesháwar Valley, was also wrecked, and four other boat bridges in the same neighbourhood were much damaged. The boat bridge over the Indus at Kashálgarh was also damaged. The danger to these bridges is always brought about by logs belonging to timber merchants being carried down in hundreds on the flood waters.

A wall at Fort Garnet, Kohát, was blown down, killing two men. The result of the enquiry into this accident demonstrated the necessity of calculating against a wind pressure of 40 lbs. per square foot when designing enclosure walls.

The Public Works Department rest-house at Bharwain and the coolies' huts and godown at Mangowál, in the Hoshiárpur District, were destroyed by fire.

Owing to abnormally heavy rain, about the 20th August, some damage was caused to the Kálka-Simla Cart Road, which was, however, promptly put to right at a cost of Rs. 23,000.

RAILWAYS AND TRAMWAYS.

No Provincial Railways.

468. There are no railways in this Province under Provincial control.

During the year the total mileage of railway lines in the Province was increased by 79 miles by the opening of the Ludhiána-Dhúri-Jakhal line.

There are no public tramways in the Punjab, the Lahore Tramway having ceased to exist. The Forest Department have constructed a tramway at Changa Manga for the extraction of fuel from the plantation at that place.

Irrigation.

Areas irrigated.

469. The area irrigated by canals under the management of the Irrigation Department was nearly 5½ million acres, being an increase of about a quarter of a million as compared with the average of the previous three years. These figures include about 400,000 acres within Native States. The increased area is mainly due to the development of irrigation on the Chenab Canal. The distribution of irrigated area between the principal canal systems is given below:—

Canal.	*Area.* (Thousands of acres.)
Chenab	1,748
Sirhind	1,070
Bári Doab	856
Western Jumna	590
Muzaffargarh	292
Indus	174
Upper Sutlej	170
Lower Sutlej	163
Chenab (Inundation)	115
Sidhnai	114
All others	181

The total financial results are noticed in the following chapter. The collections of revenue made during any particular year to a large extent depend on

assessments made during the previous year and do not therefore necessarily correspond to and vary in proportion to the areas shown as irrigated during the year.

Western Jumna Canal.

470. The capital account of the Western Jumna Canal was increased by nearly a lakh during the year and now stands at 172 lakhs. The work carried out during the year includes the completion of the Chautung Nullah scheme, the construction of several bridges, inspection-houses, residences for members of the establishment, and the remodelling of distributaries. The latter work is virtually completed everywhere except on the Sudkan Distributary, Sirsa Branch, on the Hissar Major Distributary, Hánsi Branch, and on some of the Delhi Branch Distributaries.

The Canal Head at Tájewála and subsidiary works were repaired and put into good order before the flood season. After the flood season, work was begun on remodelling a further length of 635 feet of the weir on its right flank, and removing the large shoals which had accumulated there. Some large spurs were built before the rains to protect the right bank of the Somb Nullah above Dádúpur, but were entirely destroyed by the floods. The Pathrála Dam floor was thoroughly repaired. The Fatahgarh Embankment on the right bank of the Somb Nullah below Dádúpur was repaired where partially destroyed, and the toe of the slope strengthened. The Hánsi Branch was widened in miles 5 to 12, for 7½ miles. Silting reaches at Munak and Safidon on the Hánsi Branch were worked. The Canal Upper Main Line was diverted through the Chalaundi Swamp for 102 days during the rainy season of 1901, the net silt deposited being 114⅜ lakhs cubic feet, or about half the quantity deposited during 1900. On the Delhi Branch an escape sluice was fixed in the Bowána Aqueduct to discharge into the Bowana Escape, and the widening of the Branch in miles 5 to 10 was completed.

The net income of the year amounted to 7·34 per cent. on the capital expenditure as compared with 9·10 per cent. in the previous year. There was a profit of Rs. 59,684 from navigation receipts.

The year has been a very unsatisfactory one as regards canal supply owing to the set of the river across the weir at Tájewála. The kharíf crop was a small one owing to the slack demand after good cold-weather rains, and to the new watercourse arrangements for the recent remodelling of distributaries not being completed. The rabi crop, while below the normal, was a large area for the supply available; the early failure of the monsoons caused an intense demand which could not be fully met. Remissions of the demand, aggregating Rs. 16,942, were given. The supply run during the kharíf was a little lower than in the previous year, giving the duty on the supply utilized as 64 acres against 91 of the previous year. During the rabi the demand was much greater and consequently the duty, 115 acres, is higher than the previous year's duty which was 98 acres.

Bari Doab Canal.

471. The capital account of the Bari Doab Canal now stands at 191½ lakhs.

The more important works carried out during the year were the five new distributaries to irrigate the Bet Bangar and Riárki Tracts of the Sobráon Branch; and some new minors and extensions of the Lahore Branch, the Rakh Distributary, Hunjrah Branch Distributary, Maujoki Distributary, remodelling the Bhuchar Distributary and its Kahna Branch, and extending it to a tract beyond the railway line, several extensions of the Thaman Distributary, two minors of the Doburji Distributary and the Zaffarki Distributary of the Main Branch Lower. The new Central Workshop at Amritsar was constructed and instituted from November 1901. Rest-houses were being built in connection with the distributaries at four or five places. Subordinates' rest-houses were built at fourteen places. A new set of flour mills was built complete at Nagoki on the Sobráon Branch. The Makhanwindi Drain to the Kasúr Nullah was excavated. A needle-dam was built on the Main Line, Bári Doab Canal, at Sujánpur; and other works.

On Extensions and Improvements the expenditure amounted to Rs. 76,726. The more important works on which the money was spent were as follows :—remodelling the Tughiál Bridge, Main Line ; a new bridge at Kála Bála, Kasúr Branch Lower ; remodelling and enlarging the Main Line and Distributary rest-houses at nine places ; building out-houses, cook-houses, stables, &c., at many places ; building two bridges over the Main Branch Lower ; and making, improving and extending many subsidiary channels. The advanced regulator at Tibri was remodelled.

On Maintenance and Repairs the expenditure amounted to Rs. 4,22,764. The sum spent at Mádhopur for river works was much more than during former years, as severe floods prevailed. An annual closure admitted of heavy repairs, which had been postponed for some years, being carried out. They included repairs and renewals to certain rapids and repairs to falls, including that of Nanunangal where the floor had failed. Much of the work done will admit of higher supplies being sent down the canal to Tibri and beyond in future. On the Main Branch Upper the Fattehnangal Distributary head failed and was rebuilt on an improved design ; outlets were amalgamated and water-courses remodelled on many distributaries of the Main Branch Upper and Lahore Branch. Some of the older mills which showed signs of failing were rebuilt. On the Main Branch Lower the work of remodelling outlets on several distributaries was pushed on, and is now nearly complete. This and kindred work is of great importance towards conservation of water.

The area irrigated was 7 per cent. greater than the average of the preceding three years. The net income of the year amounted to 11½ per cent. on the capital outlay. Arrangements have now been concluded in connection with the service of distributaries and water-courses under which the settlement and adjustment of disputes are now rendered easy on a sound and impartial basis.

Sirhind Canal.

472. The expenditure on capital account during the year was small. The canal has cost 245 lakhs up to date.

The area irrigated in the kharíf was smaller in every branch than during the previous five years. Various causes contributed to this result. In the first place the rainfall of the year 1900-01 was a most favourable one and a large winter crop was sown, both with and without the assistance of the canal. A large harvest resulted and cultivators were fully engaged in the early kharíf period. They therefore postponed kharíf sowings. A great many did so on account of a plague of destructive rats which manifested itself. Others again with the past year's experience preferred to wait for the regular monsoons. The actual rainfall, however, was most disappointing. The monsoons began late and ended early. There was practically no rain after the 10th of August. On the other hand, the complete failure of the winter rains that followed resulted in a Rabi irrigation little short of the highest recorded. This result was secured in spite of the fact that the river supply was abnormally low during the whole period, especially during the maturing months. The demand was intense. All cultivation was dependent on the canal, which was worked to its utmost extent in rotational turns. The limiting duties were reached, and in the end, large remissions had to be given for crops which could not be matured. The percentage of remissions rose to 9·61, and in one Division (the largest) it was 11·95 against the usual 3·00. The rabi of 1901-02 must, therefore, stand forth as a good criterion of the capability of this canal in an exceptional year. The duties secured in the various zones are valuable for the better determination of an economical allotment of supplies.

The profit earned on the British Branches amounted to Rs. 14,69,677, equivalent to 6 per cent. on the capital invested. This is lower than that secured for the last five years, and is due to the drop in irrigation of about 2⅓ lakhs of acres in the rabi of 1900-01 compared with the previous rabi, and about 2 lakhs of acres less for the whole year 1900-01. In 1900-01 the

profit and percentages were Rs. 22,30,549 and 9·11 respectively. The working expenses of the year were Rs. 8,43,394 against Rs. 8,20,912 for the previous year, 1900-01. The occupiers' rates collected amounted to Rs 21,35,958 against Rs. 28,94,201 in 1900-01, and Rs. 29,27,238 in 1899-1900. The balance of occupiers' rates uncollected at the end of the year was Rs. 1,47,837 which is an improvement compared with last year when it amounted to Rs 6,23,313 The accumulation of this balance is attributed to the prevalence of plague in the Ludhiána and Ferozepore Districts and in the Native States. Complete realisation was impossible. A considerable portion of the balance has, however, been since realised during April and May 1902. The profit earned by the Native States Branches was 4·97 per cent. by collection and 12·12 per cent. by assessment on the total capital expenditure incurred to the end of the year. The area assessed was about the average for the last six years, but it exceeds that for 1900-01, the increase being due to the large rabi consequent on a scanty rainfall.

Chenab Canal.

473. The colonization work on this canal is noticed in Chapter II.

The expenditure on Capital Account during the year amounted to Rs. 6,70,270, and the total cost of the canal, direct and indirect, is now Rs. 2,65,55,413. The expenditure of the year was incurred mainly on the following works :—completion of the groynes on the right bank of the Chenab River ; construction of spur " A " and cross spurs to I and G, H of the training works above the weir ; Pandoki Discharge Run, New Minors for Vanike Distributary ; extension of the Batere Minor, Háfizabad Distributary ; extensions of the Chiniot, Dhaular, Khewra and Killiánwála Distributary systems ; construction of the Sharakpur, Nahra and Bahlak Distributaries ; project surveys for the tract east of the Main Line and Upper Gugera Branch, for the Sultán Pakhra and the Dangali Distributaries, the large tract at the tail of the Lower Gugera Division, the Khánki Division riverain tract, and others ; rest-houses at Chuha Mal on the right bank of the Chenab River at R. D. 162,000, Chiniot Extension, six houses on the Dhaular and Khewra, six on the Sharakpur and Nahra, two on the Bahlak ; Sub-Divisional quarters at Gojra and Wer ; Telegraph offices at Gojra and Kot Lakhlána ; several *Partwárkhánás* and other minor buildings ; iron foot-bridge on the Mián Ali Branch : two regulating dams on the Burálla Branch ; outlets for the Tolwála Distributary ; formation of new plantations.

The weir and head works were thoroughly repaired ; Chenánwán Regulator protected ; considerable work done in strengthening and setting back banks of Main Line, Upper Gugera, Rakh, and Lower Gugera Branches, and in working the silting tanks ; several distributaries were thoroughly overhauled, and the channels generally maintained in efficient condition.

The development of irrigation on this canal is illustrated by the following area figures :—

	Acres.
Average of three years ending 1897-98	566,738
Ditto ditto, 1900-01	1,380,484
1901-02	1,748,129

The net revenue of the year amounted to Rs. 50,12,753, over half a crore, and equivalent to a return of 18·88 per cent. on the capital invested, as compared with 14·01, the corresponding figure of the previous year. The remissions under Tenancy Rules were Rs. 17,69,063, and, allowing 3 per cent. for collection, would have swelled the net revenue to Rs. 67,28,744, and the percentage of profit would then have been 25·34. If we take the assessments into account, deducting working expenses but including remissions under Tenancy Rules, the return amounts to Rs. 72,77,326, and the percentage of profit to

27·44. The uncollected balance of the assessments was Rs. 2,03,750. The accumulated net profits have increased from Rs. 43,05,843 at the end of 1900-01 to Rs. 82,97,643 at the close of the year under review.

Jhelum Canal.

474. This canal, which will irrigate the Doáb between the Jhelum and Chenab Rivers, was so far advanced that the opening ceremony was performed by the Lieutenant-Governor, Sir Mackworth Young, in October 1901. One distributary from the main channel was opened and an area of 65,367 acres received irrigation which, however, was given free of charge. The canal had cost up to the end of the year Rs. 94,63,053, of which Rs. 24,18,894 were expended during the year. The excavation of the Main Line has been completed, except one-third the width in a length of about 6 miles near the head. The excavation of the Southern Branch and Southern Feeder was practically completed. The Sulki Feeder was completed, as also the Sulki Escape, all except the arrangements for crossing the Sáhíwál Inundation Canal. Good progress has been made in the excavation of distributaries and the construction of bridges, regulators, buildings for establishment and other subsidiary works. The river gave much trouble in May when some of the most disastrous of the floods that have occurred during the construction of the head works swept over the whole of the weir and destroyed large quantities of material.

Other Major Irrigation Works.

475. The area of matured crops on the Sidhnái Canal was rather less than the average of the previous six years. The working of the Lower Sohág-Pára Canal was unfavourable, and heavy remissions for failure of the kharíf crop were found necessary. On both these canals the collections of revenue were favourable, amounting to 24½ per cent. and 6·31 per cent. on the capital outlay.

Minor Irrigation Works.

476. These consist of inundation canals, the areas irrigated on which have been noted in paragraph 468 above. Except in the case of the Muzaffargarh and Lower Sutlej systems, where there was a slight increase, the areas irrigated were below the average of the past triennial period. For some of these canals a capital account is kept, the total outlay aggregating to Rs. 21,23,588. The collections of the year including indirect revenue amounted to 25 per cent. on this sum as compared with 10·82 per cent. in the previous year. In the case of those canals, for which no capital account is kept, the profit amounted to Rs. 3,15,518 as compared with Rs. 2,63,034 in 1900-01. As already noted the collections of the year do not correspond to the areas irrigated within the same period. In regard to particular canals the points of interest in the year's working are noted in the following paragraphs.

Upper Sutlej Inundation Canals.

477. These canals were opened somewhat later than in the previous year, and ceased to flow on the dates noted below:—

Katora Canal	21st October 1901.
Khánwah Canal	19th " "
Upper Sohág Canal	19th " "

The policy that appears to be most immediately desirable on this group of canals is to link them up, so that in the event of one failing, it may be aided by its neighbour. There is often much spare water run to escape in the Katora Canal. Another proposal is to construct more distributaries on the Khánwah and Upper Sohág Canals as has been done on the Katora and Lower Sohág systems. This is being considered.

Lower Sutlej Inundation Canals.

478. Two considerable schemes of extensions and improvements were taken up and for the most part carried out during this year. The first was the amalgamation of the "Jamwah Kalán" Canal with "Díwánwah" and of arrangements for the future inclusion of "Bahawalwah Mailsi" also; and the second

was regrading and improving the "Mohamedwáh," "Sardárwáh" and Baháwalwah Lodhrán" Canals, and of providing them with a system of distributaries. Part of the work was done during 1900-01, but the greater part has been done during the current year. In connection with these schemes various masonry works were completed or put in hand during the year, including two double regulators, five falls, two bridges and numerous small stop-dams, while nearly 700 lakhs of earthwork were done. A new inspection-house at Karampur was built. The year was on the whole not very favourable for the working of the canals in which the supplies were generally below the average throughout the season, and especially so towards the close of it, and hence the area irrigated was not above the average. The area would have been lower but for the new distributary system that had been partially introduced, which enabled a more efficient use being made of low supplies.

Chenab Inundation Canals.

479. The principal works were a triple regulator on the Sikandarwah Canal; a needle regulator on the Sikandarabad Canal; a railway skew bridge over the Daurána Langána Canal, and various minor stop-dams. A considerable amount of levelling in connection with the proposed extension of the Gajjuhatta Canal was done. Very heavy repairs were done to the Wali Muhammad and Sikandarabad Canals, partly in silt clearance and partly in improving the banks. The supply channels received special attention, and are now much more efficient. Various other special repairs were done, and the canals were cleared and maintained in good order. There was a falling-off of 27 per cent. in the area irrigated as compared with the average of the previous six years. This was due to an insufficient supply of water in the Chenab River. The *chker* or unpaid labour system was abolished and silt clearances were effected by paid labour.

Indus Inundation Canals.

480. The year under report, unlike the preceding one, was most unfavourable for irrigation. An abnormal flood passed down the Indus on 8th and 9th May doing much damage to the rabi crops that were not then fully harvested. Thereafter the Indus fell to a very low gauge and it was not until the middle of June that it began to rise, and it continued below normal till the first week of July. During this month and August good supplies were registered, but no high floods. The canals suffered severely up to the end of June, the kharíf crop did not receive waterings in time, and it was consequently an unusually small crop. The supplies of July were utilized for increasing the rabi sowings which were larger than usual. Above Dera Gházi Khan erosion was as destructive as ever; two of the dykes built for the protection of Cantonment and City were carried away in June and July, the Sindri (Irrigation) Flood Embankment was severed in August, and shortly afterwards the Nangni (Buildings and Roads) Embankment was eroded. Retired lines of defence had to be thrown up rapidly, and were completed in time to keep out floods. The net westward movement of the Indus was over half a mile during the year.

The year was unfortunately marked by the failure of most of the canals in the Rájanpur Sub-Division, owing to the deterioration of their supply creeks and the low river. The Dhundi was the worst, the flood of May silted its supply channel and thereafter the canal had a very insufficient supply. In consequence the receipts from the Dhundi Estate (our most valuable source of income) fell to the lowest figure known for many years.

Muzaffargarh Inundation Canals.

481. The year was unfavourable, the rivers rising late, so that the kharíf sowings were hindered, while the crops when grown suffered from locusts. The supply then slightly improved and there was a large area that got rabi waterings. But owing to the entire failure of the winter rains it was impossible to fully mature the crops, and remissions had to be freely given. But for this the general results would have been more favourable. Good progress is being made in reducing the excessive number of water-courses by judicious amalgamation; and the distribution arrangements in the Division are being gradually improved. Village maps and field books are being introduced, and more attention is given to the details of irrigation.

Ghaggar Inundation Canals.

482. These canals, which were excavated in 1897 by famine relief labour, have cost up to date Rs. 6,19,100, of which sum Rs. 2,79,679 have been contributed by the Bikáner State, to the northern portion of which water is carried by the canals. The areas as irrigated in the five years which the canals have been in operation are 19,436 acres, 28,994 acres, 21,308 acres, 51,504 acres and 21,993 acres respectively. The figures betoken the unpropitious character of the seasons experienced in the Hissar District. In the year under report the floods stopped early in September. The river-irrigated crops failed almost entirely, partly for want of sufficient water and partly owing to ravages by rats. The only crops saved were those irrigated from the canals, and the canals proved of immense benefit this year, as without them all the rice crop would have been lost.

OF THE BOMBAY BRANCH OF THE ASIATIC SOCIETY

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications :—

(*a*) DEPARTMENTAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1900 to 30th September 1901.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the years 1899—1902.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1901-02.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1901-02.

Stamps.—Report on the Administration of the Stamp Department of the Punjab for the year 1899-1900, 1900-01 and 1901-02.

Income Tax.—Punjab Income Tax Report for 1901-02.

Forests.—Progress Report on Forest Administration in the Punjab for 1901-02.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1901-02.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1901-02.

(*b*) FINANCIAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, NINTH ISSUE.

Salt.—Tables III 11 and 12.

Excise.—Tables V 12.

Stamps.—Tables VII 22 to 24.

Income Tax.—Tables VIII 2, 3, 6 and 7.]

Gross Revenue and Expenditure.

Introductory.

483. The receipts and expenditure credited and debited in the accounts of the year 1901-02 to the Punjab include the income and outgoings from April 1st to November 8th, 1901, pertaining to the 31 districts of the old Province, and from November 9th, 1901, to March 31st, 1902, they include the income and expenditure of the new Province only, the receipts and charges of the North-West Frontier being excluded. It is obvious that the totals of income and expenditure arrived at in this way, though constituting actuals for the purpose of all financial adjustments, cannot be regarded as representing the true annual balance sheet of either the old or the new Province, and no comparison of such an artificial aggregate of receipts and charges can usefully be made with the accounts of any other year. For comparative and statistical purposes, however, the revenue and expenditure of the 27 districts constituting the new Province have been calculated by the Accountant-General both for the year 1901-02 and the previous year. The figures which have been brought under review in the several departmental reports are also those of the 27 districts only, and they will therefore be adopted for the purposes of this chapter.

Revenue raised in the Province.

484. The revenue raised in the Punjab and controlled by the Local Government consists of the income of all Civil Departments except the Railways, Post Office, Telegraphs and Salt Departments. A small provincial

and local revenue derived from tonga dâk services is classed as Post Office revenue, but postal receipts in general are Imperial, and, with the income of the Railways and Telegraphs, will be left out of account in the present review of the revenue yielded by the Province. The revenue of the Salt Department, though not controlled by the Local Government, is essentially revenue raised in the Province. Irrigation revenue, though practically entirely Imperial, is controlled by the Local Government. The income of Municipalities is not incorporated in the public accounts and will be dealt with separately.

Details of revenue.

485. The revenue raised in the Province is made up as follows :—

Source of revenue.	1900-01.	1901-02.
	Lakhs of rupees.	
Land Revenue	225·43	255·13
Irrigation (excluding land revenue due to canals)	141·78	144·88
Salt	63·94	64·55
Local Rates	38·89	46·27
Stamps	39·02	38·33
Excise and Opium	25·03	25·66
Income Tax	13·79	14·33
Forests	13·18	14·26
Police	7·30	7·09
Civil Works	5·86	6·09
Interest	2·93	3·28
Law and Justice	2·90	3·03
Tribute	2·79	2·89
Jails	2·14	2·38
All other items	11·19	11·22
Grand Total Receipts	596·11	639·21

The receipts under the various major revenue heads will be separately noticed below. It is necessary to premise, however, that owing to the Accountant-General and the several Heads of Departments having adopted somewhat different methods for determining the share of the total revenue to be excluded on account of the North-West Frontier Districts there are slight differences between the receipts pertaining to the Punjab, as shown in the foregoing table and as given in the departmental reports from which the details in the following paragraphs are taken.

Gross expenditure.

486. The gross expenditure, excluding expenditure of the Military, Railways, Post Office (Imperial) and Telegraph Departments, Municipal expenditure, and capital expenditure on canals, amounted to 313 lakhs in 1901-02.

The detailed items with corresponding figures for the previous year are given below :—

Department.	1900-01.	1901-02.
	Lakhs of rupees.	
Irrigation	57·16	58·73
Public Works	33·22	40·95
Land Revenue	35·52	35·63
Police	34·66	34·52
Law and Justice	30·44	32·42
Medical	12·77	14·89
Education	13·71	14·27
General Administration	12·02	12·82
Superannuation Allowances and Pensions	12·08	12·38
Jails	12·29	10·57
Forests	8·44	9·14
Political	7·68	8·36
Stationery and Printing	4·53	5·31
Salt	3·84	3·95
All other items	24·49	19·26
Grand Total Expenditure	302·65	313·20

The explanation in the preceding paragraph as to discrepancies arising from the exclusion of North-West Frontier figures apply to this table also.

Land Revenue.

What the figures include.

487. The land revenue or agricultural year does not correspond with the financial year. The former ends on 30th September, the latter on 31st March following. The land revenue collections for the year ending 30th September 1901 have been reviewed in Chapter II. The explanations there given, *viz.*, favourable harvests and recovery of arrears, apply generally to the collections for the financial year and account for the increase of 29·70 lakhs shown in the table in paragraph 485. The figures in that table include 25·62 lakhs on account of land revenue due to irrigation for which the Irrigation Department takes a book credit. Of the 35·63 lakhs shown under the land revenue expenditure head about 15 lakhs represent the expenditure of the Patwáris' Fees Fund. The income of this fund is credited in the accounts under the heading "Provincial Rates."

Irrigation.

Capital expenditure.

488. The capital expenditure to the end of the year on all canals in operation was—

	Lakhs.
Major Works	894·42
Minor Works (Imperial)	22·68
Total capital invested in canals	917·10

Of this sum 16·36 lakhs were spent during 1901-02.

Income.

489. The income realised during the year was—

Class of Works.	Direct Income.	Indirect Income.	Total.
	Lakhs of rupees.		
Major Works	131·61	14·74	146·35
Minor Works (Imperial)	11·48	10·79	22·21
Ditto (Provincial)	1·13	0·09	1·22
Ditto (Local)	0·66	...	0·66
Total ...	144·88	25·62	170·44

Working expenses.

490. The expenditure (other than capital and interest) on canals was as follows :—

	Lakhs of rupees.
Major Works	43·52
Minor Works (Imperial)	13·79
Ditto (Provincial)	1·15
Ditto (Local)	0·27
	58·73

Net Revenue, Major Works.

491. The net revenue derived from Major Canals was Rs. 1,03,08,279, being 11·52 per cent. on the capital of 894·42 lakhs. Interest charges amounted to Rs. 34,08,883, so that the net profit after paying interest was Rs. 68,99,396. For 1900-01 it was Rs. 65,22,525 and for 1899-1900 it was Rs. 55,81,063.

Net Revenue, Imperial Minor Works.

492. The net revenue from Imperial Minor Works was Rs. 8,48,307 as compared with Rs. 4,86,338. This yields a very high return on the capital which, as already stated, amounts to 22·68 lakhs.

Provincial and Local Canals.

493. For Provincial and Local Canals capital accounts are not kept. The Shahpur Provincial Canals under the management of the Irrigation Department yielded a profit of Rs. 12,000. An excess of expenditure amounting to Rs. 5,000 is shown in the case of canals under Civil Officers' management. This, however, is due to expenditure on new works being charged to revenue. A profit of Rs. 39,000 is shown under Local Canals.

Opium and Excise Revenue.

Gross revenue.

494. In the Punjab there is no separate Opium Department. The taxation of liquors, opium and drugs is the concern of the Department supervised by the Commissioner of Excise. The revenue of the year is here compared with that of the year 1901-02. The figures for the years 1891-92 and 1881-82 have been added to illustrate the growth of the revenue from this source :—

Statement showing Revenue of Excise Department.

Source of revenue.	1881-82.	1891-92.	1900-01.	1901-02.
	Rs.	Rs.	Rs.	Rs.
Spirits	6,91,360	11,61,970	15,55,135	16,29,324
Beer	...	11,430	1,01,114	1,21,572
Drugs other than Opium	1,37,560	1,57,300	2,88,712	2,84,130
Opium	3,63,510	4,14,280	5,70,843	5,90,345
Miscellaneous	...	...	802	800
Total ...	11,92,430	17,44,980	24,15,492	25,04,599

The figures for 1881-82 and 1891-92 are for 31 districts, those in the last two columns for 27 districts only.

Excise Expenditure.

495. The charges need little remark. They have been greater by about Rs. 6,000 in the year under report, but amount to only Rs. 82,667, and this total includes over Rs. 28,000 debited as the cost of the office of Commissioner of Excise, and the cost of that Special Agency of Preventive Officers which is posted in the Delhi Division, to, as far as possible, protect the Province from smuggling of Málwa opium. The cost of district establishments is only Rs. 40,000 (round).

Variation in receipts from licenses to vend Indian spirits.

496. While the receipts from fees for licenses to sell imported liquors have remained almost steady, the fees from licenses to vend Indian spirits show a decline of Rs. 56,447. The violent variations in receipts under this head have been constantly noticed. The receipts under this head accrue almost entirely from retail licenses, for although 110 wholesale licenses were granted, on a small fixed fee, these only brought in Rs. 2,640, while the fees for the retail licenses amounted to Rs. 5,51,002. Last year a variation of Rs. 74,859 in the fees for these retail licenses was reported, and in previous reports great variations have often been noticed. These variations are, of course, due to the auction system, the results of which in any one year can never be even approximately anticipated.

Variation in still-head duty.

497. Receipts in duty taken at the still-head, prior to the removal of Indian spirits from the distilleries, were greater by Rs. 1,08,127 than in the previous year. Roughly speaking, this difference indicates that the issues from the Punjab distilleries were greater by about 27,000 proof gallons, the duty being Rs. 4 per proof gallon. But it must be remembered that all the issues are no longer consumed in the Punjab as at present constituted, while duty continues to be taken in the districts in which the distilleries are situated.

Receipts from out-stills.

498. Receipts from out-stills accrue from the three out-stills at Sultánpur (Kulu), Hamírpur (Kángra) and Firozpur Jhirka (Gurgaon), which are the only out-stills existing in the Province.

Duty on malt liquor.

499. There has been an increase by Rs. 20,458 in the duty on malt liquors removed from the several breweries. The receipts (Rs. 1,21,572) are not so high as they were in the year of the Tirah Expedition, but they are higher than usual; and this is, admittedly, attributable to the fact that the bonuses, granted during the year to a proportion of the British soldiers serving in the Province, were spent to a considerable extent upon extra beer.

Breweries.

500. The number of breweries remained unchanged for many years until Messrs. Meakin and Co. opened a branch brewery at Delhi in December 1898. The premises of the branch have, however, hitherto only been used as a malting house. The site is convenient to Rewári, the excellent barley of which locality is much in request for brewing purposes.

Acreage duty on poppy cultivation.

501. The receipts from acreage duty on poppy cultivation have considerably increased, namely, by Rs. 9,777. Seasonal conditions militated against poppy sowings for the spring crop of 1900, and only 4,754 acres were put under poppy, while the area of the spring crop of 1901 amounted to 8,322 acres.

Duty on Malwa opium.

502. The receipts from duty on Málwa opium imported into the Province were greater by Rs. 9,940. Just as the Punjab poppy crop in the spring of 1900 was poor, so was the Málwa crop poor, and, in default of good imports from Málwa in 1900-01, more Excise opium than usual was purchased from treasuries. This explains the increased receipts from duty on Málwa imports in the year under report (the Málwa spring crop of 1901 having been about average), and also the decreased receipts in the gain on sale proceeds of Excise opium. The receipts under this last head have decreased by Rs. 4,809 to a total of Rs. 51,795. The receipts under this head (*i.e.*, duty on Málwa opium) may be expected to be a little less in the future, if the North-West Frontier Province makes arrangements for importing this class of opium direct from Ajmer.

Duty on Foreign opium other than Malwa opium.

503. The receipts from duty upon opium imported from the Simla Hill States and Kashmir have declined by Rs. 9,051. This decline corresponds with the decline in the receipts from Excise opium. With a poor opium outturn in the Punjab plains and in Málwa, the produce of the Himaláyan region, which

is not affected by the same climatic conditions as the plains are affected by, becomes the natural source of supply looked to to make up the deficit in stock required.

Fees for licenses to vend opium.

504. The receipts from licenses to vend opium have been Rs. 3,98,819 compared with Rs. 3,85,174, the variation being only about Rs. 13,000. The receipts are almost all on account of retail licenses, for although 227 wholesale licenses were granted, they are granted at a small fee, the receipts from them amounting only to Rs. 3,998. The receipts from fees to vend opium retail, although the licenses are auctioned as in the case of spirits, are not liable to the violent fluctuations that have been commented on in connection with spirits, because the opium licenses commonly pass into the same hands year by year. The reason possibly is that it requires some little capital to set up business as a retail vendor of opium, while in the case of vend of spirits any one can, apparently, compete. At any rate the opium licenses and drug licenses go year by year generally into the hands of big or small capitalists, who drive a steady business as the managers of certain shops or groups of shops. The number of shop licenses to sell opium retail has remained practically steady at 1,456, which gives one shop for every 68 square miles in the Province. The large increase in the number of licenses, under the Opium Act, to medical practitioners merely means that special attention has recently been paid to this branch of the licensing rules. The new opium rules (namely, those of 1901) dealt with this subject more closely than the old rules did, and chemists and native practitioners have been required to take out licenses in all cases.

Fees for licenses to vend hemp drugs.

505. The remarks made in the foregoing paragraph apply almost exactly to the case of fees for licenses to vend hemp drugs. These licenses are sold by auction, but the total of receipts (Rs. 1,58,531) differs by only Rs. 2,992 from the total of the previous year. The receipts were almost entirely on account of retail licenses, for the 64 wholesale licenses, granted at a small fixed fee, only accounted for Rs. 738.

Import duty on charas.

506. Import duty on *charas* remained practically steady, at Rs. 1,21,413.

Duty on bhang.

507. The duty on *bhang* was first introduced during the year, and it has brought in only the insignificant amount of Rs. 2,532. It is too early yet to pronounce with confidence on the working of the new tax.

Closure of Government Distilleries.

508. In 1897 there were 2 private distilleries and 15, or more, Government enclosures (called central distilleries) open in the Province for the distillation of cane-spirit. There were only 3 Government enclosures left open in the year under report, while the number of licensed private distilleries is 6. The 3 Government enclosures were those situated at Lahore, Ferozepore and Kángra. The Lahore enclosure was closed on the last day of the year under report. Thus there are now only 2 enclosures, 1 in the hills for purely local supply, and 1 in the plains, left open. The important reform, therefore, of shutting up Government enclosures in order to let private distilleries, worked under license, take their place, may be regarded as practically completed, as the Ferozepore enclosure can be shut up, whenever this may be recommended as desirable by the Commissioner of Excise. The closure of the Lahore Distillery was the decisive event determining the fresh situation, as this was the most important enclosure in the Province, and the local distillers (who now remain licensed vendors only) unsuccessfully appealed against the pending closure to the Government of India.

Private Distilleries.

509. The Province has its supply secured by the licensing of 6 private distilleries, which are marginally mentioned. These distilleries, which are to a considerable extent aided by the Rosa Distillery, are sufficient for the requirements of the Province, and no more distilleries need be licensed while present circumstances remain unchanged. At the same time there need not be any immediate hurry to close the

1. E. Dyer and Company's Distillery, Simla.
2. Lála Kishori Lal's Distillery, Karnál.
3. Dyer Bros.' Distillery, Amritsar.
4. The 'Sujánpur Sugar Company's Distillery, Sujánpur.
5. The Murree Brewery Company's Distillery, Ráwalpindi.
6. Edulji Dinshaw and Company's Distillery, Mooltan.

Ferozepore enclosure. It was represented that the large private stills, and specially the continuous still worked by the Dyer Bros. at Amritsar, would be likely to turn out quantities of spirit which would run ahead of the demand. There has, however, been no sign of such a result at present. On the contrary, the surplus stocks in the distillers' hands often run remarkably low, and, when there was in April last a call for tenders for the supply by contract of an annual 10,000 to 14,000 proof gallons to the Jammu State, the Amritsar Distillery was the only one able to make a serious tender, which was accepted practically in default of competition.

Incidence of consumption.

510. The statistics of incidence of consumption show that there is one Indian spirit shop, one opium shop and one hemp drug shop per 16,245, 13,946 and 16,245 persons respectively. This calculation is perhaps not a particularly instructive one. The net Excise revenue from all sources per 10,000 of the total population is Rs. 1,193. To make any comparison with other Provinces it is necessary to ascertain the incidence per head. This incidence is Re. 0-1-10¾ per head, while in Bengal, Assam, the United Provinces, Madras, Bombay, Sind and Burma the similar incidences are Re. 0-3-0, Re. 0-8-2, Re. 0-1-8½, Re. 0-6-8, Re. 0-10-6, Re. 0-7-6 and Re. 0-9-3 respectively. It may also be noted that of the total Excise revenue about two-thirds is derived from liquors. This is a very common proportion, other Provinces being considered.

Salt Revenue.

Control of Department.

511. The Salt Department in the Punjab is not under the control of the Local Government. It is administered by the Commissioner, Northern India Salt Revenue, from whose report the following information is taken.

Income and Expenditure.

512. There are three salt sources in the Punjab. The income and charges connected with the issue of salt from these were as follows:—

Statement of Receipts and Charges of the Punjab Salt Mines for the years 1900-01 *and* 1901-02.

Heads.	Receipts.		Charges.	
	1901-02.	1900-01.	1901-02.	1900-01.
	Rs.	Rs.	Rs.	Rs.
Cis-Indus and Kálabágh Mines	62,47,699	61,94,930	2,84,675	2,92,557
Mándi Mines	43,509	36,497	5,909	8,949
Sultánpur Salt Works	1,63,506	1,62,399	13,434	13,726
Amount paid to Bahawalpur	...	...	80,000	80,000
Total	64,54,714	63,93,826	3,84,018	3,95,232
Deduct Charges	3,84,018	3,95,232	...	...
Net Revenue	60,70,696	59,98,594	...	...

CIS-INDUS AND KALABAGH MINES.

Sales and issues.

513. A small increase of maunds 20,858 occurred in the quantity of salt sold in this Division during the year, the sales amounting to maunds 2,426,378 as compared with maunds 2,405,520 in 1900-01. Though the rate of progress has been slow, the trade of these mines has steadily increased during the past six years. A considerable increase in sales was anticipated during the year, but towards its close trade was checked by a persistent rumour that the duty was about to be reduced. The plague in the Punjab also affected the trade with that Province prejudicially to some extent.

Territorial distribution of trade.

514. The greater part of this salt is consumed in the Cis-Indus Punjab, including the Feudatory States and Kashmir. There was practically no difference in the quantity booked to this area during the past two years (maunds 1,944,153 in the past year against maunds 1,945,272 in 1900-01). Consignments to the United Provinces of Agra and Oudh were heavier by maunds 36,300 (maunds 344,225 against maunds 307,925) and to the Province of Behar in Bengal by maunds 4,552 (maunds 136,880 against maunds 132,328). Exports to the country trans-Indus fell off by maunds 2,101 (maunds 620 against maunds 2,721), but British Balúchistán took a slightly larger quantity (maunds 1,336 against maunds 1,142), and clearances for Sind increased from maunds 11,330 to maunds 21,056.

Excavation of salt.

515. No difficulty is ever experienced in meeting the trade demand at these mines. Labour is always available, and the arrangements for mining salt and placing it in the hands of traders are as efficient as it is possible to make them. Maunds 2,429,797 of rock salt were excavated during the year as compared with maunds 2,351,642 in 1900-01, or an increase of maunds 78,155. The excavation of the salt of the Mayo Mine was paid for at the rate of 10½ pies a cubic foot, and the outturn in weight amounted to 135·69 maunds a cubic foot as compared with 135 maunds in 1900-01. At Warcha, Núrpur and Kálabágh the miners are paid for the quantity of salt actually cleared by the trade, the rate at the first two places being Rs. 3-12-0 per 100 maunds, and at the Kálabágh quarries, where the sale has to be carried some distance to the bank of the Indus, Rs. 4-2-0 per 100 maunds. At the Mayo Mine the year closed with the balance of maunds 445,094 of salt available for issue, as compared with maunds 445,447 at the end of 1900-01, and this was ample to meet trade demands, as mining was in active progress at the commencement of the current year. The balances at the Warcha and Kálabágh Depôts, which were maunds 7,449 and maunds 11,123 respectively, as compared with maunds 4,800 and maunds 10,000 at the end of 1900-01, were also sufficient to meet the demand. The Núrpur Mine supplies a petty local trade, and it is not necessary to keep any stock, salt being excavated there as it is required.

MANDI MINES.

Sales and issues.

516. The sales of salt at the two quarries in the Mandi State were in excess of those of 1900-01 by maunds 27,956, the quantity sold having been maunds 139,230 as compared with maunds 111,274 in the previous year. The arrangements of the officials of the State in connection with the mining of salt were more efficient than in 1900-01, when the quarry at Guma was blocked by landslips for several months, and the supply was insufficient to meet the demand. Salt is cleared as it is disposed of, and there is therefore no difference between sales and issues.

Distribution of trade.

517. The increase in the quantity of salt issued was divided in about equal quantities between British territory (maunds 71,946 against maunds 57,683 in 1900-01) and Native States (maunds 67,284 against maunds 53,591). There was an increase in the bookings to the Kángra District of maunds 10,285 (maunds 48,886 against maunds 38,601) and of maunds 4,315 to the Kulu Valley (maunds 21,910 against maunds 17,595), but exports to the Simla District fell off by maunds 337 (maunds 1,150 against maunds 1,487). This last fluctuation is explained by the improvement in the trade from the Cis-Indus

Mines to Kálka at the foot of the Simla Hills, maunds 36,900 of rock salt having been booked to Kálka from the Mayo Mine as compared with maunds 28,500 in 1900-01—an increase of maunds 8,400. Bookings to Kángra and Kulu during 1899-1900 amounted to maunds 52,017 and maunds 18,486 respectively, so that the trade with these districts may be said to have resumed its normal dimensions during the past year. The Mandi State took maunds 11,284 more salt than in 1900-01, Suket maunds 1,808, Chamba maunds 56, Biláspur maunds 483, and Rámpur Bashahr maunds 62.

Complaints of action of Mandi officials.

518. The Commissioner of Salt Revenue is not satisfied with the registration of the salt cleared from these quarries. Instances came to his notice which went to show that the destination of the salt issued from them is not always accurately disclosed. Cases too occurred in which it appeared that the State officials were endeavouring to force the export of salt into British territory, and to depress the traffic with Native States. The Commissioner of Jullundur was addressed on this subject. The result of enquiries made showed that the consumption of Mandi salt has increased in the Kángra Valley and the Chamba State, and that rock salt has been driven back to some extent. Rock salt may recover itself when the effects of the plague upon the salt trade between the plains and the Kángra Valley have disappeared, but it will be advisable to prevent the officials of the State in charge of the quarries from forcing the trade in Mandi salt along particular channels.

SULTANPUR SALT WORKS.

Sales.

519. Sales at the Sultánpur Salt Works amounted to maunds 64,989 as compared with maunds 64,552 in 1900-01, or a trifling increase of maunds 437 only. The works just held their own, and there appears to be no elasticity in the trade. Issues amounted to maunds 65,520 against maunds 64,543 in 1900-01, or an increase of maunds 977.

Distribution of trade.

520. There was a decrease of maunds 4,232 (maunds 9,171 against maunds 13,403 in the previous year) in the quantity of salt which issued from the works for consumption in the eastern districts of the Punjab. There was an increase in the exports to Gurgaon, Bhiwáni, Hissar and Sirsa, while in Rohtak and Delhi the consignments showed a falling off.

Exports to the United Provinces of Agra and Oudh were, on the other hand, larger by maunds 5,209 (maunds 56,349 against maunds 51,140). A good deal of this salt is consumed in the foot hills of the Himalayas, where its sharp taste, owing to the presence of inferior salts, appears to be liked by the hill people. Consignments to Dehra Dún and Pilíbhít, two of the principal marts for this hill trade, amounted to maunds 18,535 as compared with maunds 13,131 in 1900-01.

Manufacture of salt.

521. The number of working factories increased from 36 to 37 during the year, and maunds 64,105 of salt were produced as compared with maunds 54,206 manufactured in 1900-01. Manufacturing conditions were favourable, the salt was of fair average quality, and nearly the whole of it was sold at remunerative prices, namely, maunds 3,207 at more than 6 annas a maund, maunds 11,823 at from 5 to under 6 annas, maunds 20,562 at from 4 to under 5 annas, maunds 28,072 at from 3 to under 4 annas, and maunds 1,325 at prices under 3 annas. The stock of salt at the close of the year amounted to maunds 2,675 as compared with maunds 3,639 at the end of 1900-01. Large stocks are not kept at these works, as the salt sells to the best advantage when freshly produced, and manufacture becomes active at the end of the official year when summer is approaching.

Stamp Revenue.

Gross Receipts.

522. The Stamp Department returns for the triennial period 1899-1900, 1900-01 and 1901-02 show that the gross receipts dwindled from Rs. 38,77,939 in the first year of the period to Rs. 37,76,922 in the last year, the average of gross receipts being Rs. 38,34,933. The average of the preceding

triennial period was Rs. 43,59,852, showing a difference of Rs. 5,24,919 on the average. This large difference is not, of course, due to ordinary variations, but principally the result of the alteration in the geographical limits of the Province owing to the elimination of the Frontier Districts. This administrative change makes comparison between the two triennial periods difficult, a difficulty which can only be got over by deducting from the totals of the previous triennial period those totals of receipts (or charges) which were returned in those years by the districts now composing the North-West Frontier Province. When this deduction has been made, the average annual gross receipts for the preceding period come down from Rs. 43,59,852 to Rs. 39,09,044, and a difference of Rs. 74,111, by which the annual average receipts of the period under report have been less than those of the preceding period, is arrived at. The causes of this decrease are noticed below.

Charges.

523. The average annual charges in the period under report, for the Province as now constituted, have been Rs. 1,46,749, and, if to this figure the average cost of general supervision and average cost of stamp and plain paper be added, a grand total of Rs. 2,22,740 is arrived at. Excluding the charges for the present Frontier Districts, the grand total of charges in the preceding period was Rs. 1,98,410 on the annual average, which gives an annual expenditure of Rs. 24,330 less.

Net Receipts.

524. The average annual figure of net receipts for the period is Rs. 36,40,565 compared with Rs. 37,10,635 in the preceding period.

Judicial Stamps.

525. Receipts from sales of judicial stamps rose from Rs. 24,45,596 in the first year of the period to Rs. 26,43,027 in 1901-02, the average figure being Rs. 25,08,953, which is almost exactly equal to the annual average for the preceding triennium, which was Rs. 25,04,709. The only variation, therefore, which need be noticed is the rise, by about 2 lakhs, in the receipts from sales in 1901-02 when compared with those for 1900-01. In the district reports this rise is generally attributed to the impetus given to litigation by the introduction of the Alienation of Land Bill, which is spoken of as having caused a "scare" to holders of mortgage rights upon land and to creditors generally. It is stated that the upward tendency in the direction of instituting suits increased the moment the Bill became law in June 1901, until the climax was reached. There were in some districts also a particularly large number of pre-emption cases arising from the same cause.

Gross Receipts, non-judicial.

526. The total receipts from sales of non-judicial stamps fell from Rs. 14,27,862 in the first year of the period to Rs. 11,30,234 in 1901-02, the variation thus observable being the inverse of the variation which occurred in the case of sales of judicial stamps. The figure of average annual receipts was Rs. 13,21,797. The average annual figure for the preceding triennium was Rs. 13,98,963, which figure indicates an average annual decrease of Rs. 77,166. But, as a matter of fact, the receipts for the first two years of the triennium under report were above the average of the preceding triennium, and it is the figure for the year 1901-02 which shows the remarkable variation. It may be noticed that in the last six years the receipts have dwindled from Rs. 15,00,000 in 1896-97 to Rs. 14,00,000 in 1897-98, Rs. 13,00,000 in 1898-99, Rs. 14,00,000 in 1899-1900 and 1900-01, and to Rs. 11,00,000 in 1901-02. As the figure of total receipts is never greatly affected, one way or the other, except by the figure of receipts from sales of impressed stamps used for recording bonds and deeds upon, it will be best to examine the variations in sales of these impressed stamps separately, and then examine any other noticeable variations in the receipts from sales of the other classes of stamps which come under the head "non-judicial," and which are included in the grand total of receipts.

Impressed Sheets.

527. Receipts from sales of impressed sheets for the last six years are shown in their proper order by the following figures, which represent lakhs:— $12\frac{3}{10}$, $11\frac{3}{5}$, $10\frac{3}{5}$, $11\frac{7}{10}$, $11\frac{2}{5}$ and $8\frac{3}{5}$. The figure for the first year (1896-97) was abnormal, being occasioned by the first setting in of that drought which has, more or less, constantly afflicted the Province, or, at any rate, many districts of it, ever since. The figures for the intermediate years indicate a tendency to go

back to the normal as far as they could under very uncertain climatic conditions, but the figure for the last year is obviously abnormal. The great decrease in sales of impressed stamps is attributed in most districts to the limitations put upon zamíndárs' credit by the Alienation of Land Act, thus decreasing the demand for impressed sheets whereon to record fresh engagements. This is, no doubt, a correct interpretation of the facts, it being sufficiently clear that the Act had the immediate effect, in the year of its origin, of increasing the demand for judicial and decreasing the demand for non-judicial stamps.

One anna adhesive revenue stamps.

528. The receipts from sales of receipt stamps (one anna adhesive revenue stamps) continue to show increase at about the same rate of expansion as has been observable since 1888-89. The annual average of receipts from the sales of these stamps in the triennium under report has been Rs. 1,40,603, compared with Rs. 1,30,325 in the preceding triennium. This higher average has principally been caused by the unusually large sales in the year 1901-02, when there was an increase in receipts of over Rs. 8,000 upon the year preceding. In the district reports the only matter affecting the sales of these stamps which is noticed is the grant of *takávi* to agriculturists, liberal grants in years of drought naturally causing some increase in the demand for receipt stamps.

Assessed Taxes.

Total Assessments and Collections.

529. The Income Tax assessments of the year 1901-02 were as follows:—

Nature of income.	Amount of tax.
	Rs.
Salaries, pensions, &c., paid by Government	1,90,641
Ditto ditto Local authority	14,664
Ditto ditto Companies and private employers	51,261
Profits of Companies	42,085
Interest on Securities	16,447
Other sources of income	11,11,764
Total Tax	14,26,852

The assessments of the previous year amounted to Rs. 14,76,987, but they included the receipts of the North-West Frontier districts. The net collections of the year under report, after allowing for refunds, amounted to Rs. 14,20,228. The cost of collection amounted to Rs. 10,547 only.

General working of the tax.

530. The general working of the tax during the year has been affected to a considerable extent by the prevalence of plague in many of the districts. Besides the disorganisation of trade generally—though this perhaps is more likely to show its effects upon the assessments for the ensuing year by diminishing the profits of the tax-paying classes—the appearance of plague in a district usually results in the exit of many of the inhabitants of the *bania* class. This considerably increases the normal difficulties of assessment and collection,

Effects of the famine and Land Alienation Act.

531. Broadly speaking, the effects of a famine upon the receipts under the head of Income Tax may be said to be two-fold: as a whole, the larger dealers in food commodities made handsome profits during the year 1900-01 and the tax upon them was proportionately increased. The banking and money-lending trades, on the other hand, are more likely to suffer in a famine year owing to the scarcity of ready money and the inability of creditors to get in payments, recurrent or otherwise, from their debtors. It is further noted from more districts than one that the effect of the Land Alienation Act has been to reduce the profits of the tax-paying classes. In the report from Hoshiárpur District the case is put thus: "In anticipation of the Land Alienation Act a considerable number of hypothecatory mortgages bearing interest were converted into usufructuary mortgages, and the mortgagees were thus freed from liability to income tax in respect of such interest." This would be the natural result of that Act, but it is as yet too early to judge how far the change has proceeded and to what extent incomes liable to tax have been affected by it.

Forest Revenue.

[Forest revenue and expenditure have already been noticed in Chapter IV.]

Provincial Revenues.

Income and Expenditure.

532. The income and expenditure of the Provincial Service account for the past three years has been as follows:—

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1899-1900	10,54,000	1,87,16,000	2,04,78,000	− 1,08,000
1900-01	*Nil.*	1,97,87,000	2,03,42,000	− 5 55,000
1901-02	*Nil.*	2,22,34,754	2,03,04,070	+ 19,30,684

From the above it will be seen that Provincial finances have been in a practically bankrupt condition until the close of the year under review, the deficits of previous years having been made good by grants-in-aid from the Imperial exchequer. The large closing balance on 31st March 1902 is subject to reduction, as the charge for interest in the account between Provincial and Imperial was unadjusted when the accounts were closed. The Provincial balance will also be liable for deficits in the balances of certain District Funds which have had heavy demands for plague expenditure. The revenue classed as Provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial Rates, have been discussed above. Provincial Rates on land include the rate levied under the District Boards Act, 1883, which is noticed in the following section, and Patwári Cess, the expenditure of which is shown under Land Revenue (Local). The greater portion of the expenditure, excluding irrigation expenditure, shown in the table in paragraph 486, is Provincial. The wholly Imperial heads of expenditure are Assignments, Political, Political Pensions, Ecclesiastical and Salt.

Provincial Contract.

533. The Provincial contract or settlement which was entered into in March 1897 expired on 31st March 1902, but owing to the abnormal circumstances of recent years—famine, plague, separation of the Frontier Districts—and to the fact that the principles on which settlements are based are under the consideration of the Government of India, it has been decided that the terms of the existing contract shall continue till 31st March 1905.

Local Funds.

534. The administrative work of District Boards has been reviewed in Chapter III. The finances of these bodies are dealt with in the following paragraphs. **Finances.**

535. Experience has now proved that the system of central audit is inadequate, and it has been decided to introduce a peripatetic audit of Local and other funds on the lines of the system in force in the United Provinces of Agra and Oudh. **Audit.**

536. The District Funds of Hissar, Hoshiárpur, Jullundur and Siálkot closed with deficit balances of Rs. 7,995, Rs. 30,009, Rs. 74,373 and Rs. 68,953 respectively. The overdraft in Hissar was due to famine, and has been adjusted by a contribution from Provincial Revenues. The overdrafts in the other districts were due entirely to expenditure on plague The recognized obligation of a District Fund in regard to expenditure in connection with plague measures is that it shall primarily meet all charges on account of disinfection, hutting, segregation, compensation, hospitals and clothing up to the full extent of its resources, the Provincial Revenues taking over any deficits revealed at the end of the official year which is occasioned by expenditure on such measures. Overdrafts due to other causes are met by a contribution from Provincial Revenues, subject to liability to adjustment in a later year. The deficits due to the former cause have since been adjusted accordingly in the accounts for 1901-02. The closing balances of Ambala, Mooltan, Jhelum and Shahpur District Funds fell below the prescribed minimum owing, in the case of Ambala, to heavy expenditure on plague, in the case of Mooltan and Jhelum to the payment of arrear contributions to Provincial Revenues, and in that of Shahpur to a falling off under receipts from cattle pounds. **Balances.**

537. District Funds opened with a balance of Rs. 6,25,310, being an increase of Rs. 81,700 (round) on the previous year's balance. The income during the year reached Rs. 33,70,000, which exceeded that of the previous year by Rs. 4,36,500. On the other hand expenditure rose by Rs. 3,38,600. **Income and Expenditure.**

The increase under receipts occurs mainly under Provincial Rates, which alone accounts for Rs. 3,61,000. There was an increase generally under most other receipt heads, partly counterbalanced by decreases under Post Office, Police and Education. The decrease under the first head is trifling, that under Police occurs chiefly under "Cattle pounds" due to sufficiency of grazing leading to less breaches of the provision of the Cattle Trespass Act, while that under Education is due mainly to a falling off under School Fees, owing to plague having affected attendance at schools in certain areas. The expenditure shows an increase of Rs. 3,38,000, of which "Medical" and "Contributions to Provincial" account for Rs. 1,18,000 and Rs. 1,89,000 respectively. Decreases occurred under Scientific and other Minor Departments, Rs. 16,000; Famine Relief, Rs. 46,000; and Civil Works, Rs. 26,000.

538. Compared with the actuals for 1900-01, there is an improvement of Rs. 3,61,000. As receipts under this head consist entirely of the share of the Local Rate collection assigned to District Boards and depend on the general land revenue collections, the increase in receipts was a natural consequence of improved agricultural conditions in the year under report. Hissar was the only District Fund which was appreciably affected by famine, its receipts showing slight decrease on those of the previous year. The Jhang District Fund retained its record for the highest revenue under this head, the actuals in 1901-02 being Rs. 1,68,000 against Rs. 1,34,000 in the previous year, due, of course, to the extension of cultivation in the Chenab Colony. **Provincial Rates.**

539. 90·8 per cent. of the receipts in 1900-01 and 91·4 per cent. in 1901-02 were derived from fees levied in Middle and Primary Schools managed by the Boards. The fee income as a whole equalled 15·6 per cent. of the total expenditure under this head. The total outlay on Education was Rs. 6,34,000, or Rs. 22,000 more than the amount expended in the previous year. The increase was general. The total net expenditure on Education after deducting **Education.**

the receipts on the same account absorbed about 22 per cent. of the Local Rate collections and about 16 per cent. of the total income of the Board, which is 9 per cent. less than the minimum that may be prescribed by Government for expenditure under this head.

Medical.

540. The receipts increased from Rs. 25,000 to Rs. 30,000, *viz.*, about Rs. 4,000 under "Hospital and Dispensary Receipts," which represents sale proceeds of old materials of plague sheds, &c., in Gurdáspur and Rs 1,000 under "Contributions." The plague charges rose from Rs. 2,28,000 in the previous year to Rs. 3,38,000 in 1901-02, and, but for the improvement in the income of District Funds generally, would have necessitated many other District Board, in addition to those above mentioned, overdrawing their balances subject to subsequent adjustment at the cost of Provincial Revenues. Excluding plague charges, the outlay on Medical Relief was Rs 3,41,000 against Rs. 3,33,000 in 1900-01. Of these totals Hospitals and Dispensaries absorbed respectively Rs 2,62,000 and Rs. 2,51,000, Vaccination Rs. 55,000 and Rs. 59,000, and grant to Leper Asylums Rs. 16,000 and Rs. 17,000. The grant of Rs. 10 000 towards the Zenána Hospital, Delhi, and the freer distribution of quinine generally, account for the increase under the head Hospitals and Dispensaries. The other variations are unimportant.

Irrigation—Minor Works.

541. The revenue and expenditure recorded under this head relate to irrigation bunds and canals maintained by District Boards and amounted to Rs. 67,000 and Rs 27,000 respectively against Rs. 22,000 and Rs. 7,000 in 1900-01. The increase of Rs. 45,000 in receipts occurred in the following districts and to the extent indicated against each—Gurgaon Rs 7,000, Delhi Rs. 1,000, Karnál Rs. 9,000, Ferozepore Rs. 14,000, and Montgomery Rs 14,000, and is due to extension of *rabi* irrigation consequent on the good rainfall in 1900-01, the charges for this irrigation being recovered during the year under report.

Civil Works.

542. The receipts under this head amount to Rs. 3,14,000 against Rs. 3,01,000 in the previous year. The improvement of Rs. 13,000 occurs under the following heads:—(1) "Rents of buildings and lands" (Rs. 4,000), which occurs mainly in Shahpur; (2) "Sale of buildings and other property" (Rs. 5,000), chiefly to the sale of a garden and a bungalow in Amritsar; (3) to better sales of trees, grass, &c. (Rs. 4,000) in Gujrát; (4) Receipts or savings from Public Works under Civil audit (Rs. 6,000), representing the sale proceeds of surplus Public Works materials. This increase was counterbalanced by a falling-off of Rs. 3,000 under Tolls on ferries, due partly to certain rivers being fordable, and partly to decrease in traffic on account of plague restrictions, and of Rs. 3,000 under Miscellaneous.

The total outlay on Civil Works was Rs. 7,31,000, or Rs. 26,000 less than that of the previous year; Rs 6 09,000 are for works including the cost of Engineering establishment and tools and plant, and Rs. 12,200 for Staging Bungalows and Serais, Ferry and Miscellaneous charges, the last representing mainly roadside arboriculture. In Civil Works the expenditure on Roads and Buildings increased considerably, but the net decrease is due to the figures of last year being swollen by an item of Rs 1,01,000, which represented the cost of raising the Raesina and Gatta Muhammadpur Bunds, this work having been undertaken as a Famine Relief work in the Gurgaon District.

Contributions.

543. Through this head the obligations of District Boards to the Provincial Government and *vice versâ* are adjusted and consist mainly of (1) 20 per cent. of the Local Rate collections, which represents the value of services rendered to District Boards by Provincial in the directions indicated in Section 37 (1) of the District Boards Act, XX of 1883; (2) Contributions on account of Provincial properties under the management of District Boards; (3) Expenditure by the Provincial Public Works on District Board works; (4) Cost of maintaining lunatics; (5) Pay of Veterinary Assistants. The contributions payable by Provincial to District Boards consist mainly of grants for Primary Schools, Vaccination, Civil Surgeons' Clerks, localized Public Works and Provincial properties, and for miscellaneous purposes. The receipts and charges during

the years 1900-01 and 1901-02 were Rs. 4,800 and Rs. 16,400, and Rs. 5,13,000 and Rs. 7,02,000, respectively. The appreciable increase of Rs. 1,89,000 during 1901-02 in the amount of contribution paid to Provincial occurs mainly under head (1) following the increase in Local Rate collections, and is also due to the payment by some District Boards of arrear contributions which were suspended in previous years owing to plague or famine having weakened their resources.

Municipal Funds.

Audit.

544. Up to the present the accounts of Municipalities have never come within the audit of any Account Officer, but a proposal is now under consideration for the introduction of a peripatetic audit by the Accountant-General, which will, among other matters, include the examination of the securities and cash balances.

Balances.

545. The several Municipalities and Notified Areas opened the year with balances aggregating Rs. 12 67,844, *i.e.*, Rs. 11,05,892 in cash and Rs. 1,61,952 in investments, and closed with an aggregate balance of Rs. 16,12,486, *viz.*, Rs. 14,29,134 in cash and Rs. 1,83,352 in investments. The increase in the cash balances of Rs 3,23,242 is due to the surplus of income in 1901-02 over expenditure due to causes, the more noticeable of which are dealt with below. None of the Municipalities overdrew its balance, but the closing balances of eight Municipalities fell below the prescribed minimum. The most noticeable deficiencies were in Zafarwál and Siálkot, where heavy expenditure on plague was incurred, and in Hoshiárpur, where there was a large outlay on the Cho Protective Work, which having been commenced could not be abandoned.

Loans.

546. The balance of loans outstanding increased by Rs. 79,000 during the year, that being the difference between advances aggregating Rs. 2,01,000 taken by the Municipal Committees of Delhi (Rs. 16,000), Simla (Rs. 1 70,000) and Hoshiárpur (Rs 15,000) against the loans sanctioned for water, drainage and other works in progress in these Municipalities, and a total of Rs. 1,22,000 recovered from these and other Municipalities in repayment of loans advanced in the present or previous years The Simla and Lahore outstanding loans include Rs. 50,000 and Rs. 1,39,500 due on debenture and to the Bank of Bengal, respectively: all the rest were obtained from Government.

Revenue and Expenditure.

547. The income from taxation and the cost of collection (including refunds) dealt with in Chapter III equal 72·7 and 11·3 per cent. of the gross Municipal Revenue and Expenditure respectively. The residues which aggregate Rs. 13,01,000 and Rs. 39,86,000 as compared with Rs. 12,72,000 and Rs. 38,27,000 in the previous year are dealt with under the main heads in the following paragraphs.

Realizations under Special Acts.

548. The total receipts under this head amounted to Rs. 34,900 against Rs. 35,100 in the previous year, of which Rs. 19,700 were realized under the Cattle Trespass Act. The cost of maintaining cattle pounds was Rs. 7,900, or about two-fifths of the receipts from this source. Fees under the Hackney Carriages Act were levied in 10 Municipalities only. The proceeds of the Local Rate levied under the District Boards Act within the Lahore and Lyallpur Municipalities were credited as usual to the Municipal Fund. The Chaukídári Act of 1856 remained in force in 13 Notified Areas.

Revenue from property and powers apart from taxation.

549. Thirty-six Municipalities derived income from the licensing of offensive and dangerous trades, 15 realized fees from bonded warehouses connected with octroi tax, and 3 levied fees on job-porters, rickshaws, &c. The receipts from these sources, with incomes derived from "Markets and slaughter-houses," "Fines under the Municipal and other Acts," "Interest on investments" and a few other petty items amounted to Rs. 98,000 out of a total income of Rs. 6,57,000 credited to this head. The residue is accounted for under "Rents of lands, houses, &c.," "Sale proceeds of lands, &c.," "Conservancy receips other than taxes," and "Fees and Revenue from Educational and Medical institutions."

"Conservancy receipts" aggregating Rs. 1,58,000 as compared with Rs. 1,53,000 in the previous year were realized in 122 Municipalities and 23

Notified Areas. The total revenue under this head is equal to about 24 per cent. of the total expenditure of Rs. 6,54,000 on "Conservancy" (including road cleaning and watering).

The Fees and Miscellaneous receipts derived from Educational and Medical institutions amounted to Rs. 2,16,000 and Rs. 25,000 against Rs. 2,11,000 and Rs. 25,000 respectively in the previous year, which added to the grants received from Government, Local Funds and other sources for Educational and Medical purposes aggregated Rs. 3,67,000 and Rs. 1,08,000 respectively, giving a percentage of 63 and 23 of the total Municipal expenditure on "Public Instruction" and "Hospitals and Dispensaries" (including "Vaccination"). The expenditure under these heads amounted to Rs. 5,80,000 and Rs. 4,66,000 respectively. The net Municipal expenditure on these accounts was, therefore, Rs. 2,13,000 and Rs. 3,58,000, or about 6 and 10 per cent. of the revenue from taxation alone and 5 and 8 per cent. of the total Municipal income, excluding grants from Government and Local Bodies and Educational and Medical receipts.

Expenditure.

General Administration	16·3
Public Safety	14·6
Public Health and Convenience	46·8
Public Instruction	12·9
Miscellaneous, including contribution for general purposes and famine relief ...	9·4

550. The expenditure of the year under review amounted to Rs. 44,98,000, which was devoted to the several major heads of service in the proportion noted in the margin.

General Administration.

551. Refunds of, and the cost of collecting, taxes which have been noticed account for 11·5 of the above-mentioned proportion under this head, leaving 4·8 as expenditure on other charges under the head, *i.e.*, Office Establishment, Inspection, Honorary Magistrates' Establishments, Survey of land, and Pensions and Gratuities.

Public Safety.

552. The expenditure under this head amounted to Rs. 6,58,000 against Rs. 6,52,000 in the previous year, the excess of Rs. 6,000 being due to an increase of Rs. 8,000 under the head "Fire Establishment" counterbalanced by decreases of Rs. 1,000 each under the heads "Lighting" and "Police." Out of the total charges of Rs. 11,800 on Fire Establishment Rs. 8,600 were incurred in Simla, where an organized fire brigade is maintained. The expenditure on lighting amounted to Rs. 1,03,000 and was spread over 96 Municipalities and 7 Notified Areas. The expenditure on Police calls for no special remark, except that the Municipality of Lahore has, on the recommendation of a Special Committee appointed for the purpose by Government, sanctioned a scheme for increasing the Police at a cost, roundly, of Rs. 21,000 per annum.

Public Health and Convenience.

553. The expenditure on "Water-supply" and "Drainage" amounted respectively to Rs. 1,37,000 and Rs. 1,39,000 under the sub-head "Capital Outlay" and Rs. 1,54,000 and Rs. 35,000 under "Establishment, Repairs, &c." The major portion of it was expended by the Delhi, Simla and Lahore Municipalities. Amritsar and Ambala spent Rs. 19,000 and Rs. 19,000 respectively. The expenditure in Jullundur, Ludhiána, Gujránwála, Murree, Ráwalpindi, Hazro and Lyallpur ranged from Rs. 2,000 to Rs. 4,000. The progress of the several drainage and water-works schemes is noticed in the following chapter under the head "Sanitation."

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information and statistics will be found in the following reports and publications :—

Census.—Report on the Census of the Punjab and North-West Frontier, 1902, by H. A. Rose, I. C. S.

Births and Deaths.—
Sanitation.—
- Report on the Sanitary Administration of the Punjab for the year 1901.
- Judicial and Administrative Statistics of British India, sixth issue, 1902. Tables XIII.

Emigration.—
- Census Report, *as above.*
- Financial and Commercial Statistics of British India, ninth issue, 1902. Table XXXV—4.

Medical Relief.—
- Report of the Dispensaries and Charitable Institutions of the Punjab for the year ending 31st December 1901.
- Statistics of the Punjab Lunatic Asylum for the year 1901.
- Judicial, &c., Statistics, *as above.* Tables XIV and XV.

Vaccination.—
- Report on Vaccination in the Punjab for the year 1901-02.
- Judicial, &c., Statistics, *as above.* Tables XVI.]

DETAILS OF CENSUS.

(*Census of 1st March* 1901.)

554. The first reliable Census of the Punjab was taken on the 1st January 1855. At that time the Delhi territory was not included in the Province. The population of the tract in question had, however, been enumerated at the Census of the North Western Provinces, taken on 1st January 1853, with the exception of the district of Sirsa,* for which the earliest reliable figures are obtained from a settlement Census taken village by village between 1852 and 1862.† The next Census was taken on the 10th of January 1868, and embraced the whole British territory of the Punjab as it then stood, but did not extend to the dominions of the Native States. This was succeeded by a more elaborate and careful enumeration on the 17th February 1881, which embraced the whole population of the old Province. The Census of 26th February 1891 related, with some insignificant variations, to the same area as that of 1881; but the Census of 1901 was extended to the Kurram Valley and the Shiranni country, territories on the North-West Frontier containing a population of 66,628 souls, and to the Cantonments of the Malákand, Dir, Swát and Chitrál. The Censuses of 1881, 1891 and 1901 were conducted on substantially the same principles. The three first enumerations were, it will be observed, separated, roughly speaking, from one another by identical intervals of a little more than 13 years, and are followed by the two recent Censuses at intervals of 10 years. In the following paragraphs the figures of the Census of 1901 are always referred to, save when the contrary is expressed. **Successive Enumerations.**

* Now partly in Hissar and partly in Ferozepore.

† A rough enumeration had previously been made in 1849.

Increase and Decrease of Population.

555. The population in British territory alone and in the Province as a whole, including the Native States, at each successive Census is shown below:—

		Increase per cent. since last Census.	Actual population.
British Territory	1881	...	17,274,494
	1891	10·0	19,009,343
	1901	6·9	20,330,339
Total Province including Native States ...	1881	...	21,156,177
	1891	10·1	23,272,623
	1901	6·4	24,754,737

In the British Districts of the Punjab as now constituted the population has risen nearly 17·7 per cent. since 1881. The rate of increase in the Native States has been 14·5 per cent. only, and the Census data tend to show that the population in British Districts is generally far more stable than it is in the Native States, in which it is subject to considerable fluctuations. The increase in the population is almost certainly a real one, and it is significant that females have increased more rapidly than males. Looking to the efficiency with which the Census was taken both in 1881 and 1891, it is difficult to attribute this increase to more complete enumeration of females in 1901, and the increase points to an improvement in the conditions of female life. Moreover the female population has as a rule decreased, but slightly in comparison with the male in the districts which have diminished population, showing that the decrease is due to the men having emigrated, temporarily or permanently, leaving the women in their homes. The rural population shows some local fluctuations, due to emigration, partly in search of grazing or employment, but mainly to the new settlements on the Chenab Canal. This latter alone is permanent in character.

Distribution over Towns and Villages.

556. Of the total population of the Punjab 88·7 per cent. is rural and 11·3 per cent. urban, the rural population being largest in the hills and in the western districts. The people inhabit 228 towns and 43,660 villages, in which they are grouped in the following proportions:—

Size of villages or towns.	Percentage of the population.	Size of villages or towns.	Percentage of the population.
Under 500	25·4	10,000—20,000 ...	2·2
500—1,000	24·0	20,000—50,000 ...	1·5
1,000—2,000	22·9	50,000—100,000 ...	1·8
2,000—5,000	15·3	Over 100,000 ...	2·3
5,000—10,000	4·5		

The cities of more than 100,000 souls are—Delhi (208,575), Lahore (202,964), and Amritsar (162,429); and the towns of more than 50,000

souls are—Ráwalpindi (87,688), Mooltan (87,394), Ambala (78,638), Jullundur (67,735), and Siálkot (57,956) in British territory, and Patiála, the capital of the State of that name, has a population of 53,545. These figures include the Cantonment populations.

Towns and Villages.

557. A 'town' was defined to include any Municipality, Civil Lines or Cantonment, and any place, with a population of not less than 50,000 souls, which has urban characteristics. The definitions in 1881 and 1891 were substantially the same. A city was further defined to be a town of more than 100,000 inhabitants. The three cities now comprise 20·6 per cent. of the urban population as against 19·3 per cent. in 1891, their population having risen 13·4 per cent. in the last 10 years. The urban population as a whole has only increased by 6·3 per cent., the tendency being for the small towns to decay and for the urban population to concentrate in the cities and large towns. There is no tendency for the general population to crowd into the towns. The average population per town is 12,234.

The 'village' of the Census was the Revenue village, the unit of 1891 being thus retained, in British territory. For this unit the average population per village is 550. In the Native States 'village' now practically corresponds to the Revenue unit in British territory, but in their case the average is only 360. But in neither case do the figures fully represent the distribution of the population over units of habitation. The land-owning tribes of the west of the Province, many of whom have but lately abandoned pastoral for agricultural pursuits, are often spread over their tribal territories in numerous small hamlets, and the 'village' is merely a group of these hamlets, included within a common boundary for administrative convenience. So where, as in the Himalayas and the Salt Range, a small body of some dominant race are the over-lords of a subject population, the former are often concentrated into a few large villages, while the latter are widely scattered over the area they still cultivate. Thus in the hills and in parts of the western districts the village is a purely artificial unit. Excluding these portions, the average village is largest where the rule of the Government which preceded our own was weakest and peace least secure, where the land-owners belong to the ruling races of the Punjab, and where a rude agriculture, largely supplemented by pastoral pursuits, renders a considerable area at once necessary to and manageable by the village.

Distribution over Area.

558. The number of souls per square mile is 185 against 174 in 1891. If the urban population be excluded, the figures at the two enumerations are 164 and 154 respectively. The incidence in British territory is 209 total and 185 rural, against 196 and 173 in 1891; and of the rural population there are 259 to the culturable, and 456 to the cultivated, square mile, as against an incidence in 1891 of 242 and 426 respectively. The density of the rural population on the total area varies from 547 in Jullundur to 50 in Miánwáli. It is greatest in the central submontane districts and smallest in the south-west. The primary condition that determines the density of the population is the existence either of an ample and seasonable rainfall or of a spring level of such moderate depth as to render well irrigation easy. This condition satisfied, the intrinsic fertility of the soil is a secondary factor.

Distribution among Houses.

559. The average number of persons to an occupied house is 6·3 throughout the Province as a whole, but it is in the plains 6·7 in the east as against 5·9 in the west; and this reflects a difference in the social customs of these two parts of the Province. The average number of persons per house in the Province is now slightly less than in 1891, and as the definition of a house for Census purposes in no way differed at the two enumerations, there seems little doubt that the tendency to separate and live in distinct houses is slowly increasing.

In the two Provinces combined the total number of houses has risen by 12·6 per cent., a rate of increase nearly double the rate at which the population has increased since 1891. The number of houses in the present Province is noted in the margin.

British Territory	...	3,212,734
Native States	...	762,557
Total	...	3,975,291

Migration and Birth-place.

560. The following table shows the elements of which the Punjab population was composed in 1901 :—

	Number of persons in each class per 100 of total population.	Number of males per 100 of both sexes in each class.
Born in the district or State of enumeration	84·7	56
Born in adjoining districts or States in the Punjab	9·0	39
Ditto ditto outside the Punjab but in India	1·6	42
Total born in adjoining districts or States	10·6	39
Born elsewhere in the Punjab	3·4	57
Born elsewhere	1·3	60
TOTAL ...	...	54

As remarked in 1892 : 'The above figures show clearly enough how largely the immigration from adjoining districts is one of females, and how the proportion of male immigrants increases as the source of immigration recedes. The large proportion of females in adjacent immigration, is, however, a feature not so much of the Province at large as of the Eastern Districts, where the custom of marrying outside the caste section, the village or the neighbourhood is much more prevalent than in the Muhammadan West, where the tribal ties are looser and marriage with near relations is encouraged rather than prohibited. The tendency throughout the Province is towards an increase in the facilities for the form of migration just described, and women are now sought for in marriage from localities more remote from home than formerly.' It may be further noted that a curious custom exists, especially in the South-East Punjab, which forbids a girl to be given in marriage to the east, though a bride may be sought in that direction.

Migration within the Province.

561. The influx of settlers into the Chenab Colony has been noticed in Chapter II. With this important exception the migration data are very similar to those of 1891, and the movements of the population in the past decade appear

to have been for the most part confined to temporary migration in search of pasture or employment. As between British Territory and the Native States the conditions resemble those of 1891, there being a gain of over 40,000 souls to British Districts by the interchange of population with the Punjab States as a whole. But individual States show somewhat different results, as for instance Patiála which now looses nearly 80,000 souls by migration as against 35,000 in 1891, and Baháwalpur only gains 12,000 as against 18,000 in 1891 in spite of the extension of its canal system. Generally speaking, there has been a set of the population towards tracts which are protected by irrigation, and even naturally fertile districts of the Himalayan submontane have lost by migration in competition with the canal-irrigated tracts, and new canals and colonies have, for a time at least, entirely changed the normal currents of migration. In spite, however, of scarcity and the inducements to emigrate offered by the opening of new canals, the population as a whole is not more migratory in character than in 1891, for in British territory 95 per cent. and in the Native States 88·2 per cent. of the population were enumerated in the district of birth, these percentages being slightly higher than in 1891.

Pressure of the Population.

562. The only districts in which the population could be regarded as congested were the submontane districts and that of Gurgaon. In the case of the former, however, the migration to the Chenab Colony has greatly reduced the pressure on the soil, most of them showing an actual decrease in population. Gurgaon supports, doubtless temporarily, a denser population than in 1891, considerable numbers having immigrated into it from the adjacent territories during the past decade.

Immigration.

563. Out of 640,685 immigrants into the Punjab, of both sexes, 605,217 persons are immigrants from the rest of India, and of these again 492,296, or five-sixths, are immigrants from the United Provinces or Rájpútána, 77,302 coming from Kashmir. The immigration from Rájpútána now amounts to 268,348 souls, exceeding that from the United Provinces by some 44,000. It has increased by over 60,000 persons since 1891, mainly on account of the scarcity prevailing in the last decade in the States of Rájpútána; whereas the volume of migration from the United Provinces has decreased, as also has that from Kashmir. Immigration from these countries is mainly confined to the districts of the Province which are contiguous to them, and is largely due to the exchange of women in marriage, especially in the case of the United Provinces.

Immigration from Afghanistan.

564. The immigration from Afghánistán is mainly confined to the districts of the North-West Frontier Province, the number (136,000) of immigrants into the old Province being almost the same as in 1891. Of these 16,489 only were immigrants into the present Province of the Punjab, and the majority of these again were probably temporary migrants.

Emigration.

565. The emigration to other parts of India is mainly from the British Districts of the east and centre of the Punjab, and is mainly to the United Provinces (131,000), Kashmir and Rájpútána (each 80,000), Bombay (43,000), and Burma and Central India (each over 20,000).

The Balance of Migration in India.

566. The net result of the migration, into and out of the Province, is that it gains 164,617 souls.

The Ages of the People.

567. The table in the margin shows the distribution of 10,000 of each sex in the Punjab Province. It will be observed that males appear to have a somewhat greater duration of life than females, but there is great uncertainty, even in the first few years of life, in the ages returned by the people. The average duration is undoubtedly lower than in Europe. The Muhammadans have a high proportion of children of both sexes, a fact confirmed by the birth returns. On the other hand, Sikhs, Hindús and Jains have much the same proportions of male

Sex.	0—10.	10—20.	20—30.	30—40.	40—50.	50—60.	60 and over.
Male...	2,600	2,144	1,631	1,370	998	651	606
Female	2,715	1,930	1,726	1,402	1,019	621	596

children, but the Sikhs have a low ratio of female children, and these facts affect the calculations of mean age, according to which Sikh females appear to be longer-lived than any other section of the community, while Muhammadans of both sexes show the lowest mean age. The proportion of children is lowest in the east of the Province, and noticeably so in the district of Hissar, which was affected by scarcity in the 1891—1901 decade, and in the district of Ambala.

The Civil Condition of the People.

568. The figures in the margin give the distribution in the Punjab population of 10,000 persons of each sex, and show that, as in previous Censuses, many males remain unmarried, while the proportion of unmarried females is small. The number of unmarried males is no doubt to a certain extent due to the fact that the number of females is far less than the number of males, but prudential reasons also lead to many men remaining unmarried, or, in the Himalayan area and among the Játs of the plains, to polyandric practices.

Civil condition.	Males.	Females.
Single	5,269	3,699
Married	4,092	4,919
Widowed	639	1,382
All conditions	10,000	10,000

The age of marriage is as a rule lower in the east than in the west of the Punjab, but the custom varies in the same locality and in the same religious community, being mainly dependent on social considerations. Child marriage is, however, essentially a Hindu practice, for, while out of 10,000 females there are 358 under 15 married, among Hindús only the ratio is 501 per 10,000, among Sikhs 340 and among Muhammadans 243. Below the age of 10 the Hindu ratio is by far the highest.

Polygamy.

569. There are 102·6 wives to 100 husbands, so that polygamy is rare, and mainly confined to the Muhammadans who return 10·1 polygamists in 1,000 husbands, the Hindús and Sikhs only returning 6·2 *per mille*. Among the two latter polygamy is doubtless almost entirely due to the custom which allows a brother to marry the widow of a deceased brother, but this practice is not allowed by the higher classes. The Jains disallow a second marriage under any circumstances to either party.

Widow Remarriage.

570. There are 138 widows to every 1,000 females and the proportion of women over 15 years of age who are widows is 222 *per mille* and is only slightly higher among Hindús (247 *per mille*) than among Muhammadans (203 *per mille*). The proportion of widowers is also high, being 64 in 1,000 males, and here again the Hindús show a higher ratio (71 *per mille*) than the Muhammadans (57 *per mille*). The proportion of widowers is highest in the south-east of the Province, where the proportion of widows is also highest.

The Proportions of the Sexes.

571. There are, in the Punjab, 854 females to 1,000 males, as against 851 in 1891 and 845 in 1881. This improvement in the ratio of females may be due to improved enumeration, but it is more likely that it is due to improved conditions, moral and material. The figures are to some extent affected by migration, and as males emigrate to countries beyond India in some numbers while females do not, the real ratio is probably a little lower than the one given above. The vital statistical returns show that male births are to female as 111·6 to 100, but there is apparently a slight tendency for the number of females to increase more rapidly than the number of males. This tendency is, however, counteracted by the greater mortality among females. As in England there is a greater average mortality amongst males in the first year of life than amongst females, but in the years of scarcity, 1897 and 1900, the reverse was the case. After the first year of life the rate of female mortality greatly exceeds the male, until the close of the 30—40 age-period. The death-rates among infants are exceedingly high as compared with those in England, and after infancy the female death-rate in the 1—5 age-period points to considerable neglect of girl children, resulting in a disturbance of the natural balance of the sexes.

572. The proportions of the sexes in the various religions are noted in the margin. As in 1891 and 1881, the Sikhs have a remarkably low proportion of females, and especially so in the early years of life. These observations are true of all the central districts in which the Sikhs are found in large numbers, and it is thus clear that locality alone does not determine the proportions of the sexes. The Sikh figures are not explicable by any tendency to return Sikh females as Hindús or by conversions of Hindu males to Sikhism, at least to any appreciable extent, but are mainly to be ascribed to the low ratios of females of all ages and of girls among the Játs of the Central Punjab among whom Sikhism is the dominant religion.

Proportion of Sexes by Religions.

	Number of females to every 100 Males.	
	All ages.	Under 5.
Hindús	84·4	92·6
Sikhs	77·8	77·4
Muhammadans	87·7	94·9
All religions	85·4	92·6

573. All castes, almost without exception, have fewer females than males, but generally speaking the deficiency of females is most marked in the higher castes, as the marginal data show. The ratio of female to male births does not appear to be materially different from that found in Europe, and the remarkably low ratios of females found in certain castes are almost certainly to be ascribed to the social system or organisation of the higher tribes in each caste which is imitated or reflected with more or less fidelity by the lower castes, and which results in a depreciation of female child life. Various tribes have traditions of female infanticide, but the practice, as a deliberate crime, is probably more comparatively rare, the neglect of female children surviving as a relic of the former custom.

Proportion of Sexes by Caste.

Caste.	Religion.	Females per 1,000 males.
Ját ...	Hindu ...	793
	Sikh ...	757
	Muhammadan ...	852
Gujar ...	Hindu ...	797
	Muhammadan ...	855
Khatri ...	Hindu ...	818
	Sikh	801
Rájpút ...	Hindu ...	821
	Muhammadan ...	884
Chúhra ...	Hindu ...	859
	Muhammadan ...	878

Taking the figures by castes it may be said that the proportion of females is largest among the disreputable and out-caste groups, and lowest among the higher castes. The castes which return a ratio below the average for the Province are shown in the margin and comprise the principal castes in the Punjab. The Játs return a conspicuously low ratio, as a body, and this is still more marked among the Sikh Játs who return only 75·7 females per 100 males, Hindu Játs returning 79·3 per cent. and Muhammadans 85·2 per cent. Similarly, while Muhammadan Rájpúts have 88·4 per cent., Hindu Rájpúts only return 82·1 per cent. The proportion of females is frequently lowest, according to the returns, in the years of childhood, after the first year of life.

	Females per 100 males.	
	1901.	1891.
All castes	85·4	85
Ját	80·6	80·2
Bhábra	81·2	...
Khatri	81·7	79·7
Thákar	82·5	74·6
Káith	83·1	...
Súd	83·5	...
Gujar	83·9	84·8
Brahman	84·2	84·1
Saini	84·6	...
Bania	84·6	...
Bhátia	85·0	...
Rájpút	86·8	84·8

The Infirmities of the People.

574. The figures in the margin show the numbers in each 10,000 of the population suffering from each of the infirmities, recorded at the last two Censuses, for the present Province. The improvement since 1881 is very marked, only 42·1 persons in 10,000 being now returned as afflicted as against 72 in that year. The improvement is marked in each infirmity. Since 1891 the number of the insane shows an apparent increase, but the number of deaf-mutes has decreased considerably, and it would seem that insanity has been often confused with deaf-mutism by the enumerating agency.

Infirmities.	Number suffering per 10,000.	
	1901.	1891.
Total afflicted	43·5	...
Total infirmities	43·9	50·3
Insane	3·5	2·9
Blind	8·0	9·8
Deaf mutes	30·5	35·0
Lepers	1·9	2·6

Births and Deaths.

Births.

575. The total number of births in 1901 in the Punjab, as it is at present constituted, amounted to 712,533, giving a rate of 35·4 per 1,000 of the population according to the Census of 1901. This rate is 3·4 less than that of the previous year and 5·7 lower than the mean ratio for the preceding five years. The falling off in the birth-rate in 1901 was due principally to the great unhealthiness of the last four months of 1900. The birth-rates recorded in different districts in 1901, compared with the average rates in the previous quinquennial period, show, with one exception, a decrease in every district of the Province. The districts of Ferozepore and Ambala, which had the excessively high death-rates of 80 and 65 per *mille* respectively in 1900, showed a decrease in the birth-rate in 1901, as compared with the average, of no less than 16·7 and 14·9 per *mille*.

Taking the Province as a whole, the number of births in 1901 were 14,078 less than the number of deaths, or at the rate of 0·7 per *mille*.

Deaths.

576. The deaths in 1901 numbered 726,611, equal to rate of 36·1 per 1,000 of the population of 1901. The male death-rate was 34·5 and the female 38·1. The highest death-rates were registered in the districts of Ludhiána, Karnál and Ferozepore, *viz.*, 52·2, 51·5 and 48·8 per *mille* respectively. The districts of Kángra, Gujrát and Jhang had the comparatively moderate rates of 29·5, 29·2 and 27·8 per 1,000 respectively. The lowest death-rate, *i.e.*, 19·5, was recorded in the district of Simla.

Unhealthy towns.

577. The unhealthiest towns in 1901, with death-rates varying between 51 and 91 per *mille*, were Gohána, Karnál, Máchhiwára, Sirsa, Chunián, Nawashahr, Akálgarh, Núrmahal, Ráekot, Kila Sobha Singh, Zafarwál and Ráhon. The principal cause of the excessive mortality in these towns was either fever or plague.

Seasonal mortality.

578. With regard to the seasonal mortality, the largest number of deaths was registered in the last quarter of the year. During this period more deaths were recorded than the total of the seven months, February to August. The cause of the high mortality was chiefly the prevalence of malarial fevers.

Rates for ages and classes.

579. The highest death-rate was, as usual, recorded among infants under one year of age. The registered mortality was at the rate of 270 among males per 1,000 living and 279 among females. The next highest rates were among old persons of 60 years and upwards, *viz.*, 95·14 among males and 103·45 among females. Among children over 1 and under 5 years, the rates were 68·21 for males and 71·62 for females. The lowest death-rates were recorded between 5 and 40 years ranging from 9·01 for males and 12·04 for females under the age-period 10 to 15, to 15·88 for males and 18·64

for females under 30 to 40. The death-rate among Hindús in the Punjab in 1901 was 39·14 per *mille* and among Muhammadans 33·58. The death-rate among Native Christians was 15·57.

580. The Province was almost free from cholera during the year. There were only 180 deaths registered from this disease. Of this number 58 occurred in the district of Ambala and 51 in that of Karnál. **Cholera.**

581. From small-pox the deaths reported were 6,154, giving a death-rate of 0·31 per *mille* against 0·45 for the previous year and a mean rate of 0·71 for the previous five years. The largest number of deaths from this disease were reported from the districts of Jhang and Montgomery, *viz.*, 1,298 and 1,082 respectively, or nearly two-fifths of the total mortality from small-pox in the Province. In the Kángra District, on the other hand, only 20 deaths from small-pox were registered in 1901. In this district the number of persons successfully vaccinated in 1900-01 was 70 per 1,000 of the population, while in the districts of Jhang and Montgomery the rates were only 26 and 20. Of the Municipal towns, Patti, Miáni, Bhera, Sáhiwál, Hariána, Kartárpur, Alipur, Montgomery, Pákpattan, Gurdáspur and Maghiána registered a very high death-rate from small-pox. In all these towns there was a large number of children remaining unvaccinated at the end of the year 1900-01. In Simla also, notwithstanding that the compulsory Vaccination Act is in force in that town, the small-pox mortality was high. **Small-pox.**

582. There was a great increase in the deaths reported from plague as compared with the previous year, the number reported being as many as 14,959 against only 495 in 1900. Most of the deaths occurred in the following four districts:—Gurdáspur 4,325, Jullundur 3,857, Siálkot 3,695 and Hoshiárpur 2,308. There was an extraordinary preponderance of female over male deaths from plague, the proportion being 148 to 100, against 101 to 100 among deaths from all causes excluding plague. Of the total of 14,959 deaths from plague, 2,061 occurred in May, 3,123 in November and no less than 6,053 in December. The minimum mortality was recorded in August. In this month only 48 deaths were registered. The vast majority of cases are stated to have been of the bubonic type, though cases of pneumonic and septicæmic type were also observed. **Plague.**

583. With regard to the effect of inoculation in reducing the mortality from plague, the Chief Plague Medical Officer states that a mild and less fatal form of the disease prevailed in the tahsíls of Nawashahr and Garhshankar, in which a large number of the population had been inoculated. In nearly all cases under observation the infection of places was due to human intercourse, either direct or through the medium of clothes or other property. **Inoculation.**

584. Under the head of fevers the mortality fell considerably during the year, the total deaths registered being 508,035 or as many as 141,594 less than the previous year. The death-rate was equivalent to 25·3 per *mille* against 32·3 in 1900. Compared with the mean ratio for the previous five years, which was only 18·3, the death-rate in 1901 was very high. The decrease in the fever mortality during the year was very considerable in those districts which had suffered most severely from malarial fevers in 1900. Thus in Hissar the death-rate fell from 70 in 1900 to 37 in 1901, in Ferozepore from 64 to 40, in Ambala from 49 to 28 and in Karnál from 54 to 40. The districts in which comparatively low death-rates were recorded in 1901 were Kángra, Hoshiárpur, Gurdáspur and those in the Ráwalpindi and Mooltan Divisions, the ratios varying between 14 and 21 per 1,000. **Malaria.**

585. The deaths from dysentery and diarrhœa amounted to 14,722, equal to a rate of 0·73 per 1,000. Contrasted with the number reported last year, there was a decrease of no fewer than 10,570 deaths. The diminution was most marked in Ferozepore and in the districts of the Delhi Division. **Dysentery and diarrhœa.**

586. Of the 6,303 deaths caused by injuries, 366 were due to suicide, 461 to wounding, 4,473 to accidents, 33 to wild animals and 1,003 to snake-bite. **Injuries.**

Other causes.

587. The deaths grouped under the head "All other causes" numbered 176,258, including 39,983 recorded from chest diseases.

Pasteur Institute.

588. The Pasteur Institute at Kasauli was opened on the 9th of August 1900, and during the first year ending 8th August 1901 there were 321 patients treated. Up to the 21st of August 1901 there were 3 deaths.

Emigration and Immigration.

Inland emigration.

589. The Inland Emigration Act of 1882 is not in force in this Province.

Emigration to East Africa.

590. The emigration statistics published by the Government of India show that nearly 30,000 male Punjábís, chiefly coolies destined for work on the Uganda Railway, emigrated from the Ports of Bombay and Karáchi to Mombasa since 1896. They were for the most part recruited under agreements made with or on behalf of the Imperial Government.

Emigration to other countries.

591. The number of Punjábi emigrants under Act XXI of 1883 to other countries during the decade was quite insignificant. Prior to 1899-1900 the number did not amount to 100 in any year. In that year and in 1900-01 the numbers were 189 and 268. Such recruiting as takes place is in Delhi and the districts round Delhi. It is believed that the emigrants go chiefly to Fiji, Borneo, Sumatra and the Mauritius.

Census figures.

592. As regards such non-State-regulated migration as takes place with the free movement of the population and of individuals, some notes are recorded in the opening section of this chapter. According to census figures the Province gained 190,734 souls during the decade as the net result of migration into and out of its limits. These figures, while including 167,277 immigrants, many of them Europeans, from countries outside of India, take no account of emigration from the Punjab to such countries, the figures for which, except in the case of the State-regulated emigration noticed above, are of course unobtainable.

Medical Relief.

Dispensaries opened and closed.

593. The number of new dispensaries opened during the year was 3, *viz.*, at Ládwa, Karnál District, Mani Májra, Ambala District, and Gojra, Jhang District, and a similar number was closed, *viz.*, Hissar Itinerating, Indri, Karnál District, and Kála, Jhelum District. Twenty-eight were transferred to the North-West Frontier Province, leaving 245 dispensaries in operation at the end of the year as against 273 at the end of 1900 and 267 at the end of the triennial period which closed with the year 1898. The dispensary at Indri was closed, as it was found that the locality was unsuitable. Ládwa in the same district was selected instead. Kála was too near to the Jhelum Dispensary to do any good, and the purpose for which the Hissar Itinerating Dispensary was opened for a few months in 1900 ceased to exist.

In-door patients.

594. There were 51,565 in-door patients treated at dispensaries in 1901 as compared with 52,531 in 1900, after deducting the figures of the Frontier dispensaries. Compared with the year 1900 there was a diminution in both the total number and the daily average number of in-door patients. Moreover, each patient remained in hospital for a shorter period on the average in 1901 than in 1900. This does not indicate any falling off in the estimation of the dispensaries among the people in general, as the year 1901 was comparatively healthy and plague interfered with the attendance at dispensaries in certain infected areas. Out of the total number of 51,565 in-door patients, 34,725 were returned as cured, 9,008 relieved, 4,289 discharged otherwise, and 2,344 died. The death-rate in hospital in 1901 and the two preceding years was 4·54, 6·87 and 4·41 per cent. respectively, the normal rate being between 4 and 5 per cent. The number of beds available was 2,830, of which 1,944 were for men and 886 for women. Compared with the daily average number of in-patients, *viz.*, 1,711·32, the accommodation appears more than ample.

595. The number of out-patients treated was 2,973,446 as compared with 2,937,050 in 1900, an increase of 36,396. The attendance of women as in-door and out-door patients was better in 1901 than in 1900, while the attendance of children shows a slight decrease. Out-patients.

596. The table below gives details of the principal diseases which were treated at dispensaries in 1901 :— Diseases treated.

	1901.
Small-pox	57
Cholera	121
Malarial fevers	550,719
Dysentery	56,535
Diarrhœa	36,774
Lung diseases	11,994
Other diseases of the respiratory system	210,423
Syphilitic affections	14,385
Rheumatic do.	64,970
Diseases of the nervous system	74,661
Do. eye	381,836
Do. ear	186,963
Dyspepsia	183,679
Other diseases of the digestive system	325,080
Goitre	33,910
Spleen diseases	34,658
Diseases of the generative system	19,817
Do. connective tissue	94,781
Do. skin	189,529
Ulcers	255,764
Injuries { General	2,898
Injuries { Local	102,058

597. Fever cases were by far the most frequently treated, amounting to over 18 per cent. of the attendance. Eye cases, too, were largely represented by 381,836. The total number of operations performed was 151,827 as compared with 165,222 in 1900, a decrease of 13,395. But deducting the operations performed, about 18,000, in the Frontier dispensaries from the figures for 1900, there was really an increase. Comments on foregoing table.

598. Cataract operations numbered 6,387 as compared with 5,614 in 1900. There were 5,204 cures, and the percentage of successes was 91·68 as against 89·86 in 1900. Of the two deaths shown against the cases of extraction of the lens, one died of heart disease and the other of heat apoplexy. Eye operations.

599. Operations for stone numbered 2,019. Of these 67 died, giving the low percentage of 11·34 deaths to operations. Operations for stone.

Leper Asylums.

600. On the 1st January 1901 there were 428 lepers in the asylums in the Province. One hundred and forty-three were admitted during the year, making a total of 571. Of these 64 died, 117 left of their own accord, and there remained only 390 in residence at the end of the year. The expenditure of the asylums amounted to Rs. 24,034 as compared with Rs. 24,840 in 1900. Decrease in number of inmates.

Lunatic Asylum.

601. At the close of the year 1900 there were 482 lunatics (379 males and 103 females) in confinement. One hundred and twenty-eight (111 males and 17 females) were admitted and re-admitted during the year 1901, making a total population of 610 (490 males and 120 females), of whom 129 were Statistics of the year.

criminals. In 1900 the total population was 608 (487 males and 121 females), including 128 criminals. Of the 75 shown as discharged during the year, 39 were cured and 24 were made over to friends, 12 were discharged otherwise, and 59 (43 males and 13 females) died, leaving 479 (378 males and 101 females) in confinement at the end of the year. The total expenditure on the asylum amounted to Rs. 71,491-13-6, and the profits from manufactures amounted to Rs. 4,175-12-2; the net cost of the asylum to Government was therefore Rs. 67,316-1-4, giving an average net cost per head for maintenance of Rs. 116-10-9.

Sanitation.

Income and Expenditure.

602. Of the aggregate income of all Municipal towns, which in 1901 amounted to Rs. 47,12,710, exclusive of the opening balance of Rs. 10,96,939, the amount expended on sanitation was Rs. 12,18,598, *viz.*, on conservancy Rs. 6,67,426, paving streets Rs. 38,966, roads and bridges Rs. 2,10,810, drainage and sewerage Rs. 73,757, water-supply Rs. 2,12,235, latrines Rs. 12,006, and widening of streets Rs. 3,298. The income derived from the sale of manure in the Municipal towns in 1901 was Rs. 1,50,471. The largest income, amounting to Rs. 40,036, was realized in Amritsar. In the large towns of Delhi and Lahore the income under this head was only Rs. 14,139 and Rs. 11,327 respectively. There are five towns which dispose of sewage to cultivators. In Amritsar 320 acres are irrigated by sewage, in Lahore 167, in Ludhiána 35 and in Gujránwála 40. The prices charged vary. In Amritsar Rs. 10 per acre are paid close to the city and Rs. 4 per acre further away. In Lahore Rs. 14-8-0 to Rs. 19-4-0 per acre are paid, in Ludhiána Rs. 10-8-0 and in Gujránwála Rs. 5-13-0. The information from Delhi has not been received.

Sanitary Works.

603. The Sanitary Board met five times during the year. The proceedings of the Board and the Report of the Sanitary Engineer, annexed to the Sanitary Report, show satisfactory progress in important sanitary works. There was a considerable improvement in the water-supply and sewerage works of Simla. The extension of the Delhi Water-Works and the Drainage Schemes of Abbott-abad and Fázilka were completed. The estimates for the Amritsar Water-Works, the extra-mural drainage of Ambala, the water-supply scheme of Lyallpur Town and Civil Station and the drainage scheme of Lyallpur Town were sanctioned by Government. In Amritsar a new site for the supply wells on higher ground and a mile nearer the city than the one formerly fixed upon, which is more or less in a swamp, has been selected. The Drainage Projects of Ráwalpindi, Ferozepore, Mooltan, Gujrát, Muktsar, Sángla, Chuníán and Chiniot Road, and the extension of the water-supply of Kálka, were under consideration.

Simla Improvement Scheme.

604. The works connected with this scheme represent water and sewage extensions undertaken by the Provincial Public Works Department, the major portion of which were completed by that Department and handed over to the Municipal Committee: the remaining works are either in progress or being arranged for. The materials for sewage extension which were indented for from England have arrived, and pipe-laying has been pushed through vigorously. The construction of a Ducat filter was completed and is in working order. A great many soil receptacles and manholes were completed during the year, and the work on pipe connections to public latrines has been taken in hand.

Delhi Water and Drainage Works.

605. The water-works extension which was in progress in 1900-01 has been completed. The drainage works have been held in abeyance for want of funds, but the Municipality is now arranging to raise a loan for the purpose.

Lahore Water and Drainage Works.

606. The new pumping engine purchased in the previous year was brought into use and has worked satisfactorily. The Committee has ordered a second engine 25 per cent. more powerful. The drainage works of the city were completed during the preceding year, and those for Anárkali which were in progress in 1900-01 were completed during the year under review. These arrangements have immeasurably improved the sanitary condition of these places. The locomotives, wagons and rails for the Conservancy Tramway were received

and paid for during the year under review, resulting in an increase of Rs. 88,000 under the head Conservancy compared with the previous year's charges. Unfortunately the death of the Committee's Engineer in the middle of the year delayed the construction of the line, but it is hoped that the work will be soon resumed.

Amritsar Water-works.

607. A loan of 12 lakhs applied for by the Committee having been sanctioned this year the work will be proceeded with by the Public Works Department.

Other Water and Drainage Works.

608. The scheme for a water-supply and drainage for the town of Lyallpur which was worked out in 1901-02 was sanctioned by Government in the current year. A loan of Rs. 70,000 was sanctioned by Government in 1901 for drainage works in Ambala, and the preparation of land plans showing land to be acquired was put in hand and the manufacture of bricks was started, but the work could not be put in hand owing to the prevalence of plague in the city and its suburbs.

Vaccination.

Vaccination Staff.

609. The Vaccination staff was re-graded during the year. For the two classes of Native Supervisors on Rs. 40 and Rs. 30 per mensem, three grades of Rs. 55, Rs. 35 and Rs. 25 were substituted. The three grades of Vaccinators on Rs. 15, Rs. 12 and Rs. 10 per month were redistributed in four grades of Rs 20, Rs. 15, Rs. 12 and Rs. 10 per mensem. The revision of establishment has considerably improved the prospects of the Subordinate Vaccination Staff. The revised Vaccination establishment, after transferring the staff to the New Frontier Province, consisted at the end of the year of 3 Divisional Inspectors, 27 Native Supervisors and 258 Vaccinators.

Cost of vaccination statistics.

610. The total cost of the Department during the year amounted to Rs. 92,045; the average cost per successful case of vaccination was Re. 0-2-7.

The aggregate number of vaccine operations performed by all establishments was 668,144; of this number 511,121 were primary vaccinations and 157,023 re-vaccinations. The percentage of success in primary vaccinations was 93·92 against 94·46 in 1900-01. The success in re-vaccinations amounted to 58·47 against 62·83 in the previous year.

Work of District Staff.

611. Of the aggregate of 668,144 operations, about 90 per cent. were performed by the district staff. The number of primary vaccinations operated by the district staff was 451,689, or 38,668 less than last year. The deficiency was caused by the prevalence of plague. No less than three-fourths of the decrease occurred in the plague-infected districts of Gurdáspur, Lahore, Ludhiána, Ambala and Jullundur. The district staff performed 139,098 re-vaccinations against 134,358 in the preceding year. The percentage of success in primary vaccinations done by the district staff was 95·41, or almost the same as in the previous two years; the percentage of successful re-vaccinations was 59·1 against 63·8 in 1900-01. The highest proportion of persons successfully vaccinated per 1,000 of population was, as usual, in the district of Kángra. The ratio in 1901-02 was 61·24 against the provincial average of 25·52. The good work in Kángra has practically stamped small-pox out of this district. The average annual number of deaths from this disease during the six years ending in 1901-02 did not exceed 17.

The Special Staff.

612. This staff performed 71,266 operations against 80,825 in 1900-01. The principal cause of decrease as the opposition met in the Hill States of Simla during the cold weather. Of the total of primary operations done by the special staff, there were 55,557 primary operations, or 11,867 fewer than last year. Under the head of re-vaccinations the work of the special staff was more satisfactory, the number performed being 15,709 against 13,401 in the previous year. The amount of success in primary vaccinations was 81·89 against 85·73 in 1900-01, and in re-vaccinations 51·5 against 48·68.

The Cantonment Staff.

613. The number of vaccinations performed by the Cantonment staff was 3,739 primary and 1,692 secondary, and the percentages of success were 92·75 and 71·75 respectively. In 1900-01 the number of primary vaccinations was 4,644 and re-vaccinations 3,316, and the percentages of success amounted to 94·98 and 78·05.

The Dispensary Staff.

614. This staff performed 660 vaccinations, showing an increase of 209 over the number done last year. The number of primary vaccinations was 136 and of re-vaccinations 524, the percentages of successful cases being 81·62 and 56·68 respectively.

General.

615. The Deputy Sanitary Commissioner was employed as Chief Plague Medical Officer, and the Sanitary Commissioner was almost without any assistance in supervising the work of the Department. The inspection work was on the whole satisfactory. With regard to improvement of vaccination in Municipal towns the matter is engaging the attention of the Sanitary Commissioner. The orders of the Government of India for a trial on a large scale of glycerinated lymph could not be carried out for want of a whole-time Deputy Sanitary Commissioner.

CHAPTER VII.

INSTRUCTION.

[Detailed information on the subject of Education will be found in the Annual Reports on Public Instruction in the Punjab and in the statistical tables appended thereto, also in the tables under X—Education in the yearly volumes of Judicial and Administrative Statistics of British India published by the Director-General of Statistics. Under heading XII of the same volumes statistics of printing presses and newspapers are given.]

GENERAL SYSTEM OF PUBLIC INSTRUCTION.

Establishment of the Education Department.

616. The Department of Public Instruction in the Punjab was instituted in January 1856, and the first Annual Report of the Director, the late Mr. W. Arnold, was submitted shortly after the outbreak of the Mutiny in the year following. Education, however, had occupied the attention of Government ever since the annexation, and at the time when the Department was organised there were 34 schools maintained from public funds, and 12 Mission schools, most of which were in receipt of grants-in-aid.

Progress up to date.

617. Since then education has made rapid strides, and at this day there are 16 Colleges, 351 Secondary Schools, 2,583 Primary Schools, 19 Schools for special instruction, and 3,850 Private Schools.

History of Indigenous Education.

618. Mr. Arnold's first step was to ascertain what the people had been doing themselves in the way of education. The idea of education was not new in the Punjab. A school phraseology was supplied chiefly by the Muhammadans, who as educators were in possession of the field. Not only was the Qurán taught in every mosque, but outside a great many mosques the standard Persian works were taught to all comers. These Persian Schools were the most genuine educational institutions in the country, and formed the foundation of the existing Government vernacular school system. The teachers were almost exclusively Muhammadans, but among the pupils the Hindús were more numerous than the Muhammadans. Schools in which only the Qurán was read by rote, and those in which the children of shopkeepers were taught arithmetic and book-keeping, were left out of consideration as educationally worthless, and little more account was made of purely Arabic and Sanskrit Schools, in which young men and boys were trained for religious functions. The statistics of Gurmukhi schools, which were chiefly of a religious character, were too imperfect to be of much assistance. Real Hindi Schools were very rare, and most of those returned as Hindi Schools were chiefly of the class described above for the benefit of shopkeepers or Brahmans. The average income of the teachers was found hardly to exceed Rs. 2 a month in cash, but offerings in kind and fees for performing religious ceremonies formed a material addition to their means of subsistence.

Indigenous Education at the present day.

619. The number of such schools for boys has now decreased, which leads to the conclusion that the rudimentary instruction imparted in them is no longer considered sufficient by the people for their boys, who are either sent to receive education in Public Schools, or employed to help their parents in domestic or other business. The Private Schools for girls are, however, on the increase, which shows that with a general appreciation of female education and a revived and religious enthusiasm a number of schools have been started by benevolent societies and private individuals for the benefit of girls. The Department is doing its best to encourage Private Schools by awarding grants on very easy terms.

Appointment of Educational Officers and organization of a system of Public Instruction.

620. The Educational Department was administered at first by a Director, 2 Inspectors of Schools, 10 Deputy Inspectors, and 60 Sub-Deputy Inspectors. The schools directly supported by Government consisted of 24 Zillah Schools, 100 Tahsíli Schools, and 4 Normal Schools. A cess of 1 per cent. on the land revenue was devoted to the maintenance of a large number of village schools. The Department so constituted cost about 3 lakhs of rupees per annum.

Since then a University has been formed in the Punjab, and a Government College is maintained at Lahore with a Principal and an adequate staff of Professors. The Department is at present administered by a Director, 5 Inspectors, 1 Inspectress, 8 Assistant Inspectors, and 26 District Inspectors of Schools.

Attitude of the people towards the Government system of Education.

621. The first impression of the people, when they heard of a Government education scheme, was that their children were to be taught in exactly the same way as formerly by the Mián or Pandit, but that the teachers were in future to be paid by the Government instead of by the parents; and so long as this notion prevailed, Government education was extremely popular. Both teachers and scholars, however, particularly objected to the study of Urdu. To educate a boy by teaching him his own language seemed to them to be almost a contradiction in terms. It was of course necessary to conciliate the people, and the plan adopted was to give the teachers two lists of books,—one of Urdu books which *must* be read, and another of Persian books which *might* be read. With a better appreciation of what constitutes true education the prejudice in favour of purely linguistic study is weakening, and the importance of practical instruction in all subjects through the vernacular is being recognised more widely.

Choice of the Urdu language in the Persian character as the recognised Vernacular of the Punjab.

622. It was resolved from the first to make the Urdu language and the Persian alphabet the one language and the one alphabet in Government Schools, the Urdu language being chosen as more than any other dialect the common vernacular of the Province, and the Persian character inasmuch as it was said to be used almost exclusively by the population of the western half of the Punjab, and in nearly two-thirds of the indigenous schools of the eastern districts. Besides which, the Urdu language written in the Persian character was used in the Courts, and was the most general medium of communication in the business transactions of all classes, except in matters pertaining to their particular trades and occupations. At the same time Hindi Schools were to be encouraged wherever the people desired them, in view of the danger of throwing education entirely into the hands of the Muhammadans. But the claims of Punjábi have not been ignored; the Education Code provides for the establishment of Gurmukhi Branch Schools; and the language is also provided for in Zamíndári and Female Schools.

Important change in 1860 in the system of administration.

623. Such was the origin of public instruction in the Punjab, and its subsequent history has followed the lines then traced out. In 1860, however, an important change was made in the system of administration. It had been a moot point whether the management of the Cess schools should rest with the Educational or District Officers, but during the first few years the practice of the North-Western Provinces was followed, by which schools of all kinds were under the direct control of the Department. The practical severance of the District authorities from the work of education obviously entailed a serious loss of power, and so much dissatisfaction was caused that the Vernacular schools, which formed the great majority, were transferred to the charge of the Deputy Commissioners.

At the same time the Native Deputy Inspectors were dismissed, or employed on reduced salaries as School Muharrirs, and an attempt was made to entrust the subordinate control and inspection of Vernacular Schools to the Tahsíldárs. The necessity for professional superintendence, however, soon became apparent, and eventually each district was provided with a District Inspector or Chief School Muharrir who was subordinate to the Deputy Commissioner and whose business it was to visit and inspect every school in his charge once a quarter, to maintain discipline, to appoint, transfer, or promote teachers, and generally to be the Deputy Commissioner's principal executive agent in the management of the schools. In 1886, in furtherance of the policy of Local Self-Government, all the Zillah Schools were transferred to the management of Municipal Committees, but this devolution of control has not been so successful as was anticipated. Under the orders of the Government of India issued in 1901, the Zillah Schools will again be taken over by the Government Educational Department.

Progress of Education from 1860 to 1870.

624. In 1862 an enthusiastic movement was initiated in favour of female education, and a grand Darbár was held at Lahore under the presidency of Sir Robert Montgomery, then Lieutenant-Governor, for the purpose of enlisting the co-operation of the Chiefs and other Native gentlemen of the Punjab. Under this impulse hundreds of schools were opened, and in 1866 the number amounted to about 1,000, with 20,000 scholars. But it was easier to create a nominal attendance than to obtain any substantial results, and before long, in consequence of necessary reforms, there was a very considerable reduction. There is no reason to doubt the wisdom of the change of system which led to diminished numbers; but it may be regretted that there was so little foundation for an enterprise which at one time seemed to promise well. In 1864 Government Colleges were established at Lahore and Delhi. At the latter place there had been one before the Mutiny, which had since then been in abeyance. In 1865 the Anjuman-i-Punjab was founded, and in connection with it a scheme was originated for establishing an Oriental University. The proposed institution has since developed into the Punjab University. Between 1868 and 1870 a change of considerable importance was made in the status of village school masters. In 1859 their pay had been fixed in grades of Rs. 5, Rs. 7 and Rs. 10 per mensem, and, although these grades had not been rigidly observed, they represented the average scale of pay up to 1868. It was now determined that no teacher, excepting assistants, should draw less than Rs. 10 per mensem, and, as the time was unfavourable to proposals for increased expenditure, the result was that some 300 schools were closed and 10,000 scholars struck off the rolls.

Effect of the Decentralization Scheme in 1871.

625. The financial change known as the decentralization scheme, by which the Local Governments were entrusted with the duty of budgeting and controlling expenditure in certain departments hitherto treated as Imperial, was followed and supplemented by the Punjab Local Rates Act of 1871. The general effect of this Act in the course of the next few years was to double the amount hitherto received from the Educational Cess, which now became merged in the District Fund, and thus to increase largely the means at the disposal of the new District Committees for the education of the agricultural class. Meanwhile, increased assignments were made by the Municipalities, and in 1873-74 the numbers on the rolls of village schools exceeded by 20,000, the lowest figure reached in 1869-70 after the reduction described above. At the same rate, by raising the pay and position of teachers and of inspecting officers in the subordinate grades, a further step was made towards the improvement of the general efficiency of the schools.

Further development of the Educational System of the Punjab.

626. The Education Report for 1875-76 shows that the number of schools and scholars, and the expenditure upon education, continued to increase, though not so rapidly as in the first year or two after the impulse given by the additional funds provided under the Local Rates Act. There was an apparent decrease in Aided Schools, which is explained by the transfer of several such schools managed by Government Officers to the category of Government Schools. In fact, the grant-in-aid system, so far as Native education is concerned, had up to this time in the Punjab been used almost exclusively by the Missionaries, whose valuable contribution to the education of the Province did not in any way represent the self-help of the people.

In the same report the Director speaks "of the eagerness for education" displayed in some of the more advanced districts of the Punjab. This eagerness appears to have been due to the orders of Government by which official appointments and promotion were to be reserved for those who had passed the Middle School Examination. But the examination proved to be more difficult than was expected; and it was not in the nature of things that the expectations of the student class should be more than very partially realised. There was, accordingly, a reaction before long, though, on the whole, progress was maintained.

Important measures subsequent to the Decentralization in 1871.

627. The Middle School Examination, to test the proficiency of the scholars midway between the Primary and Entrance Standards, had been instituted in 1869; and in 1872-73 the first examinations by the Upper and Lower Primary Standards were held by the Inspectors. The classification of schools

according to stages of instruction was gradually introduced during the next few years; and in 1879-80 a revised set of statistical forms was adopted under the orders of the Government of India. Under the new classification, a school, which had hitherto been called a High School, with its high, middle and primary departments, was now treated in the returns as three separate schools—a High School, a Middle School and a Primary School. Similarly a Middle School was returned as two schools; and in this way the number of schools was nominally raised by upwards of 100, an error which was corrected by the statistical forms subsequently adopted on the recommendations of a Sub-Committee of the Education Commission appointed for the purpose. In 1877 the Government College at Delhi was abolished, with a view to having a fully equipped College for the Province at Lahore. In 1875 the Mayo School of Industrial Art was established at Lahore, and in 1881 the Central Training College for the supply of trained teachers for English Schools and for Secondary Schools.

Progress of Education from 1871 to 1883.

628. The disorganization of society by epidemic fever is of frequent occurrence in Northern India; and between 1877 and 1880 education was seriously checked by this cause, and also by an extraordinary demand for labour during the Afghán War. The numbers returned as under instruction were further reduced by the omission of Jail Schools from the new statistical tables. The period was one of steady improvement in the internal organization of the schools and in the character of the instruction imparted; but there was not that extension of education among the people that might have been expected, notwithstanding a considerable increase in expenditure. It was left to the next decade to witness a marked expansion of educational effort in the Punjab, carried forward on improved lines, and attended with the best results.

Recommendations of the Education Commission.

629. The Education Commission of 1882 marks a new era in the history of education in India. The whole educational system then prevailing was carefully considered in all its bearings; detailed recommendations of a practical character were made under every head; and these recommendations have not only formed the basis of a new departure in matters of public instruction, but continue to supply lines for guidance in all parts of the educational movement. The chief recommendations concerned the recognition and encouragement of Indigenous Schools so far as these can be made to serve any purpose of secular education; the need of increased efforts in favour of the extension of Primary Education; the rendering of Secondary Education less stereotyped, as well as more practical, than it had hitherto been; the revision of the system of scholarships so as to make them open to all students without restriction; the raising, gradually and cautiously, of the tuition fees up to a certain point; some modification of the grant-in-aid rules; facilities for the transfer of Government institutions to Local management; the moral training and physical development of the students; the encouragement of Female Education; an increased inspecting agency; and the holding of Conferences for the discussion of questions affecting education. The recommendations were generally adopted in the Punjab, which resulted in an all but complete reorganization of the Educational Department and of the educational machinery of the Province.

Chief measures adopted in the Punjab in accordance with the recommendations of the Education Commission.

630. Rules have been laid down for the award of grants to Indigenous Schools according to various simple standards; and all public officers are required to bring to notice any schools that may appear suitable for a grant, the Managers of which may desire this. In 1883-84 a sum of Rs. 8,000 from Provincial Revenues was assigned for the establishment of new Primary Schools, on condition that an equivalent amount should be devoted to the same purpose from Local Funds. In 1886-87 a further allotment of over a lakh of rupees from Provincial Revenues was provided for the extension and improvement of Primary Education; and a number of Zamíndári Schools, intended to meet the special simple requirements of the agricultural class, were opened in nearly every district. In the same year all schools for general education, with the exception of the Model or Practising Schools attached to Training Institutions, were transferred to the management of Municipal Committees, and rules have been laid down with the view of affording every encouragement to their conversion into Aided Schools,

when adequate guarantees of efficiency and permanency are available. Rules have also been framed making the further extension of Secondary Education ordinarily dependent on contributions from private sources. To give greater variety to the studies in Secondary Schools, a Clerical and Commercial Course has been adopted by the Punjab University as alternative with the ordinary Entrance Course, and leading to office and business occupations rather than to continued University studies, and also a Special Science Course, fitting either for further scientific study or for some technical line of life. The rules for scholarships have been entirely re-cast in conformity with the principles laid down by the Education Commission, Open Scholarships being awarded on a system common to the whole Province, and Close Scholarships on more restricted conditions, but the award being in each case according to merit, and on the results of public examinations. Provision has also been made for the encouragement of higher education amongst certain backward classes, by founding the Jubilee Scholarships for Muhammadans and of Zamíndári Scholarships for Hindu agriculturists. New rules for the levy of fees were introduced in 1886, aided institutions being required to fix their rates at not less than three-fourths of those laid down for Government and Board Schools. The grant-in-aid rules were entirely re-cast in 1886, embodying the system of payment-by-results, which is now in full and successful operation. Special attention has been given during the last few years to the subject of moral instruction and school discipline, and measures have been adopted, including special instructions to Inspectors and Teachers and the introduction of inter-School rules and of Good Conduct Registers, to secure the end in view. Great progress has also been made in the arrangements for physical training. Gymnastic apparatus has been supplied to nearly all the larger schools; gymnastic teachers have been attached to the Training Institutions, to other individual schools, and as itinerant instructors in districts; playgrounds have been provided; tournaments have been organised; and courses of instruction in athletics and elementary drill have been laid down for the various classes of schools. In 1886 a fifth circle of inspection was organised; additional Assistant Inspectors were appointed; considerable improvement was effected in the position and prospects of District Inspectors; and in these and other ways the efficiency of the inspecting staff was largely augmented. In 1889 an Inspectress of Schools was appointed; the grant-in-aid rules specially provide for the encouragement of Female Schools; and the institution of scholarships for girls on passing the Lower Primary and Upper Primary Examinations has exercised a marked influence on the attendance in the higher classes. Educational Conferences have been held regularly since 1886, at which all matters affecting educational work in the Province have been discussed; and it would be difficult to over-estimate the benefit to practical education of these meetings, or their advantage in furthering the educational policy of the Government.

631. Besides the measures sketched in the last paragraph, considerable progress has been made in other directions during the last few years. The schemes of study have all been carefully revised; the schools are much better supplied with furniture and the necessary appliances; and the quality of the teachers has much improved. Two new Normal Schools have been opened, thus providing one Training Institution for each Inspectional Circle; the Model Schools attached to the Training Institutions have been placed on an improved footing; revised rules for Teachers' Certificates have been introduced; no one can now obtain permanent employment in a Government or Board School who does not hold a Certificate; and the grant-in-aid rules are so framed as to ensure the eventual employment of none but Certificated Teachers in Aided Schools. Normal Classes for the training of Female Teachers have been instituted in several Girls' Schools; and a Certificate Examination is now held annually with an increasing number of successful candidates. In furtherance of Technical and Industrial Education in the Province, the staff of the Mayo School of Art has been strengthened by the appointment from England of a Vice-Principal; the Railway Technical School at Lahore was opened in 1889, and has been attended with marked success; courses of instruction, both in general and technical subjects, have been prescribed for Industrial Schools; rules have been framed for the award of grants to Aided Industrial Schools; and small scholarships are offered

Later developments.

to the pupils of Industrial Schools, up to a certain limit, on their passing the Lower Primary Examination in all the compulsory subjects, both general and special. The Aitchison College, known at first as the Punjab Chiefs' College, was established in 1886; and the success which has attended this institution, with the large number of the sons of Native gentlemen now in attendance on the ordinary schools, is evidence of the growing appreciation of a good education among the Chiefs and Gentry of the Province. The Boarding-House system has made a great advance during the last few years; and rules have been laid down to secure the comfort of the boarders and the maintenance of efficient supervision. The Text-Book Committee has meanwhile been doing much for the supply of suitable text-books to the schools, as well as for the encouragement of vernacular literature. The rules of the Department, including the provisions sanctioned within recent years, have been incorporated in the Punjab Education Code, which is now a compendium of the whole educational system of the Province.

Progress of Education from 1883 to 1893.

632. The statistics of 1893 showed an increase of 605 Public Institutions more than in 1883, with 30,625 more scholars. There were 6 more colleges, with 819 as compared with 113 students, and 298 Secondary Schools, with 50,710 scholars against 231 Schools and 5,785 scholars in the earlier return. The statistics of Private Institutions for the same year cannot be compared, primarily because it is only now that the returns of these schools are becoming at all reliable, and also because of the recent exclusion of all schools with less than six scholars. But a practical comparison may be made. Since 1885 efforts have been directed to bring Indigenous Schools under the influence of the Department, and of the 6,836 such Schools returned in 1893, with 104,404 scholars, 651 schools with 24,517 scholars were examined for grants last year. The increasing number of such schools and of private Adventure Schools claiming to be examined by the Department is one of the most hopeful signs for the advance of elementary education in the Province. With the increase in the number of schools the expenditure has risen from Rs. 16,21,000 to Rs. 28,07,000, or by about 73 per cent., while the income from fees has risen from Rs. 1,33,889 to Rs. 5,00,109, or by Rs. 3,66,220.

Progress of Education from 1893 to 1902.

633. In 1902 there were 595 more Public Institutions than in 1893, with 35,608 scholars. Since 1893 the number of colleges in the Province has risen by 7, and the total attendance compared with that in 1893 shows an increase of 928 scholars. Secondary Schools have risen by 80 and Primary Schools by 495. Private institutions have, on the other hand, decreased by 2,986. With the exception of the years 1894 and 1899, when Private Institutions showed an increase of 47 and 24 respectively, each year has closed with a fall in the number of such schools, which shows that the rudimentary instruction given in them is no longer considered adequate. With the increase in Public Institutions the expenditure in 1902 is Rs. 4,38,029, or nearly 25 per cent. in excess of what it was in 1893, while the income from fees is now Rs 4,35,111 more than it was in that year. And apart from the numerical improvement in Public Schools very fair advance is discernible in the method and character of the instruction imparted. The study of agriculture has become more general in Primary Schools, and the new schemes of object lessons will, it is hoped, much improve the system of object teaching. Elementary standards in common handicrafts, such as shoemaking, tailoring, wood and metal work, &c., and in drawing, have been adopted for use in the Industrial Sections of schools of the Aided Indigenous type. More elaborate courses is Repoussé-work, Tin-work, &c., have been added to the curriculum for advanced technical schools. Drawing has been made a part of the instruction given in all Training Institutions, so that trained teachers will now know something of the utility of this subject as an important factor in general education. The Kindergarten System too has come to have a recognised place in the course of study laid down for these Institutions. A new Manual on School Method in the Vernacular for the use of Normal Schools was compiled only last year. Teachers' Associations for the discussion of educational subjects, specially those connected with modern methods of teaching, have been organized in every Government and Board Secondary School in the Province. The need of better suited text-books for girls' schools was long felt, and the preparation of a series specially adapted to the requirements of girls has been taken in hand.

History of the Punjab University.

634. The proposal to establish a University at Lahore was recommended by the Punjab Government in 1868. The Governor-General in Council was at that time unable to sanction the scheme. He was willing, however, to allow a grant-in-aid equivalent to the annual income of Rs. 21,000 expected from private sources on condition that, instead of expending the funds in establishing a University or examining body, they should be applied to the extension and improvement of the existing Lahore Government College on the principles advocated by the Punjab Government. The decision of the Government of India failed to satisfy the promoters of the Punjab University, and after further correspondence a compromise was accepted by them as a step towards the fulfilment of their design. The new institution, which was styled "The Punjab University College," was inaugurated by Sir Donald McLeod as President in January 1870. A governing body, called the "Senate," was appointed, and statutes were framed in which the special objects of the University College were declared to be—

(1) to promote the diffusion of European science, as far as possible, through the medium of the Vernacular languages of the Punjab, and the improvement and extension of Vernacular literature generally;

(2) to afford encouragement to the enlightened study of Eastern classical languages and literature;

(3) to associate the learned and influential classes with Government in the promotion and supervision of popular education.

To carry out this policy the University College established an Oriental School and College at Lahore; endowed lectureships, literary fellowships, and scholarships; and held Public examinations in the various subjects of study which it was desired to encourage.

But the desire of the Punjab people for a University of their own never abated. The question was revived in 1878 in connection with a movement made on the occasion of the Imperial Assemblage at Delhi on 1st January 1877, and the Secretary of State, on being satisfied that the examinations of the Punjab University College were of such a nature as to justify that body being entrusted with the power to grant degrees, accorded his permission to the introduction of an Act for the incorporation of a University in 1880. An Act for this purpose was accordingly passed in 1882 as Act XVII of that year, and on 14th October the Punjab University was incorporated and received the power of conferring Degrees for Oriental Learning and Arts. The Viceroy consented to become the Patron of the institution, the Lieutenant-Governor was appointed *ex-officio* Chancellor, and the members of Senate were designated Fellows. Authority is granted by the Act to the Governor-General in Council to empower the University to confer degrees in Law, Medicine, Science and Engineering also when it shall be proved to his satisfaction that the arrangements and examinations of the University are such as to render the conferring of these powers desirable. In accordance with this authority, the power to confer Degrees in Medicine was conceded in 1886, and Degrees in Law and Science in 1891.

Sketch of the organization of schools for general education.

635. Schools for general education, whether departmental or aided, are classified as Vernacular or English, and as Primary or Secondary. Primary Schools afford a course of instruction extending over five years and terminating with an examination called the Upper Primary Examination. There are five classes, of which the first three form the Lower Primary School and the fourth and fifth the Upper Primary School.

In the Lower Primary section of both English and Vernacular Schools there is a uniform course of study, which includes Vernacular Reading and Writing, Arithmetic as far as the Compound Rules, Object Lessons, and the Geography of the Punjab, with elementary Needlework for girls. In the Upper Primary section the subjects of study are the same in both kinds of schools, with the exception that in place of English in the Anglo-Vernacular Schools the Vernacular Schools have Mensuration. For the Upper Primary Examination a scholar has to read at sight and write from dictation passages from a Vernacular

book of ordinary difficulty, to work sums in Vulgar Fractions, the Rule of Three, Practice, Square Measure and Simple Interest. In Girls' Schools less Arithmetic is required, and some special Readers are prescribed; but the classification and standards are generally similar. The following are also prescribed as optional subjects:—English, Mensuration, Geography, Elementary Persian, Sanskrit, or Arabic, Common Things, and for Girls Needlework. On the results of the Upper Primary Examination Scholarships to a limited extent are awarded by districts, and are tenable in the classes of the Middle Department. Secondary Schools are either Middle Schools or High Schools. A Middle School contains a Primary and Middle Department, the Primary Department consisting of the five classes of an ordinary Primary School, and the Middle Department of an extra course, extending over three classes, and terminating with the Middle School Examination. A High School embraces a Primary, Middle and High Department, the first two corresponding to a Middle School, and the last having a course of two years, and terminating with the Entrance Examination. All who are admitted to the Middle Department are ordinarily required to have passed the Upper Primary Examination in the same way as the Middle School Examination is the ordinary test of admission to a High Department. The above system of classification is obligatory in Government and Board Schools, and has been adopted, almost without exception, in Aided Schools. The subjects of study in the Middle Department are determined by the course prescribed for the Middle School Examination. In this examination a Vernacular Language, Arithmetic and Mensuration, History, Geography and the Sanitary Primer, with English for Anglo-Vernacular, and Euclid and Algebra for Vernacular scholars, are compulsory; and candidates are allowed to select not more than two of the following optional subjects:—Persian, Arabic or Sanskrit, Elementary Science, and for Anglo-Vernacular scholars Euclid and Algebra. The examination is conducted through the medium of Urdu, the recognised Vernacular of the Province. Scholarships are awarded on the results of the examination, and are tenable in the classes of the High Department. The course of instruction in High Departments embraces the subjects prescribed for the Middle School Examination, but carried to a higher stage. On passing the Entrance Examination in English, students are admitted to the Arts Colleges, and on passing in the Vernacular to the Oriental College, Lahore. The Middle School Examination was at first conducted by the Educational Department; but in 1884 it was made over to the Punjab University, and it is now proposed that the Education Department should resume control over this examination.

Education.

General Summary.

Total Figures. 636. In the following paragraphs the comparison instituted is between the statistics of 1901-02 and those of 1896-97. The comparison therefore affords an estimate of the progress made during a quinquennial period. The number of Public Institutions has increased from 2,976 to 3,003, or by 27, and that of scholars attending them from 173,026 to 182,303 or by 9,277. Private Schools continue to decrease, there being 3,850 against 4,349, or 499 less, with 1934 fewer pupils. In both Public and Private Institutions there is a fall of 472 in the number of schools, while in the number of scholars there is a rise of 7,343. The number of girls under instruction has risen in both Public and Private Schools, and is now 24,700 against 18,963, or 5,737 more than in 1896-97.

Colleges. 637. There are now 16 Colleges against 10 in 1896-97. The number of students in the Arts Colleges (English) has increased by 143, and in the Oriental College by 17; but the roll of the Law College has decreased from 433 to 159, or by 274, and that of the Medical College from 238 to 181, or by 57.

Secondary Schools. 638. The number of Secondary Schools for boys has increased from 291 to 351, and they contain 8,126 more pupils than in 1896-97; for girls there are three schools less, but the attendance has risen by 358. The total number of Secondary Schools is now 385 against 322, with 65,474 pupils against 56,990;

showing an increase of 63 schools and 8,484 scholars during the quinquennium. The number at the High stage is 3,898 against 2,817, at the Middle stage 18,912 against 15,805, and at the Primary stage of Secondary Schools 42,670 against 38,368.

Primary Schools.

639. The number of Primary Schools for boys has fallen by 53, and the attendance by 1,156; but the number of such schools for girls has risen by 10 with 1,681 more pupils. Altogether there are now 2,583 Primary Schools against 2,626 in 1896-97, with 112,997 pupils against 112,472, or an increase of 525 pupils with 43 less schools. Add to these 42,670 reading in the Primary Departments of Secondary Schools, and the total number in receipt of Primary education comes to 155,667 against 150,840 five years ago.

Special Instruction.

640. There are 19 Schools for Special Instruction against 16, attended by 2,085 scholars against 1,640 five years ago. Three of these, with 164 pupils, are for girls.

Private Institutions.

641. The Private Institutions are now 3,850 against 4,349 in the year 1896-97, there being a fall of 643 in Boys' Schools, and an increase of 144 in the number of Girls' Schools. Consequently the number of boys attending these schools has gone down by 5,653, but that of girls has risen by 3,719. Six schools for Europeans, with 122 pupils, are included.

Fees.

642. The income from Fees of all kinds was Rs. 9,35,221 against Rs. 7,78,363, or Rs. 1,56,858 more. The expenditure was 28·74 per cent. of the total, compared with 26·33 per cent. five years ago. From the Tuition Fees alone the income for the year was Rs. 7,24,639 against Rs. 6,00,247, or an increase of Rs. 1,24,392, which was in all kinds of institutions, and mostly in the Arts and Law Colleges and the Secondary, Primary and Special Schools. The income from "Other Fees" was Rs. 2,10,582 against Rs. 1,78,116, or Rs. 32,466 more than what it was five years ago. This increase was confined to fees for admission to examinations.

PUBLIC EXAMINATIONS.

University.

643. In the Intermediate Examination (Arts) 338 passed out of 610, or 55·4 per cent., against 269 out of 485, or 55·5 per cent., in 1896-97. On the Oriental side only 2 went up and passed, and in Science 6 out of 10. In the First Arts Examination of the Calcutta University only one boy appeared from the Bishop Cotton School, Simla, but he failed. In the B. A. Examination, 136 passed out of 328, or 41·5 per cent., against 104 out of 308, or 33·7 per cent., in the year under comparison. In the B. O. L. Examination, the pass was 2 out of 4 against 1 out of 3. In the B. Sc. Examination both the candidates from the forman Christian College, Lahore, were successful. In the M. A. Examination, 23 out of 34 passed against 16 out of 33. In the M. O. L. Examination, there was no candidate this year, compared with 1 out of 2 in the previous quinquennium. On the Arts side the total number of candidates in the Punjab University Examinations was, therefore, 984 against 826, with 505 passes against 389. Of College candidates 413 out of 717 passed, or 57·6 per cent., against 306 out of 592, or 51·6 per cent. Of private candidates 92 passed out of 267, or 34·5 per cent., against 83 out of 234, or 35·4 per cent. Excluding all candidates, except those presented by the Provincial Colleges, we find that in the Intermediate Examination (Arts and Science) 63·0 per cent. passed against 60·8; in the B. A. Examination (Arts and Science) 47·0 against 36·5; and in the M. A. Examination 65·2 against 57·4. In the Entrance Examination (Arts, Oriental, and Science Faculties), as well as the Clerical and Commercial Examination, 867 candidates passed out of 1,657, or 52·3 per cent., against 705 out of 1,279, or 55·1 per cent., in the year under comparison. Only 5 candidates appeared in the Entrance Examination on the Oriental side, and 4 of them were successful. Thirty-nine passes out of 51 candidates for the High School Examination for European Schools are included in the above figures. Fourteen out of 20 passed the Entrance Examination of the Science Faculty, the successful candidates coming from various schools in Lahore and Ráwalpindi; 9 of them took up Drawing as an optional subject.

Clerical and Commercial.

644. In the Clerical and Commercial Examination 12 out of 33 passed from the Municipal Board School, Hoshiárpur, and the Clerical and Commercial School, Amritsar. Six of them passed in Shorthand-writing. As usual, the Central Model School, distinguished itself in the Science Examination, passing all the 8 candidates sent up.

Middle School Examinations.

645. In the Middle School Examination, 2,831 out of 5,357, or 52·8 per cent., were successful, compared with 3,088 out of 4,151, or 74·3 per cent., returned five years ago. On the Anglo-Vernacular side, 1,874 passed out of 3,786, or 49·5 per cent., against 1,962 out of 2,793, or 70·2 per cent., in 1896-97; and on the Vernacular side 957 passed out of 1,571, or 60·9 per cent., against 1,126 out of 1,358, or 82·9 per cent. The number of candidates for this examination rose from 10,548 to 11,704, and of these 8,396 passed against 8,098, giving a percentage of 71·7 against 76·7. Besides these, 1,611 candidates, who had already passed in Vernacular subjects, took up English only, and of them 1,394 were successful. As in the previous year, a large number of schools in plague-affected areas were left uninspected, but for this the above figures would have been larger. One hundred and twenty-eight candidates and 102 passes from European Schools are included. In the Oriental Language Examinations the number of candidates rose from 262 to 424, or by 61·8 per cent., and that of passes from 126 to 238, or by 88·8 per cent.

Law.

646. In the Preliminary Examination in Law 53 candidates passed out of 62 against 100 out of 131; in the First Certificate Examination 29 out of 51 against 26 out of 78; and in the Licentiate Examination 38 out of 50 against 13 out of 18. On the Degree side 22 out of 31 passed the Intermediate Examination against 30 out of 49; and 22 out of 65 the LL.B. Examination against 23 out of 26 One candidate passed the special test for graduates from other Provinces. Altogether 165 passed out of 260, compared with 192 out of 302 five years ago. There is still no boarding-house, and the College Classes meet in a hired building.

Medicine.

647. In the Preliminary Scientific Examination 26 out of 43 passed, 11 out of 18 in the First Examination for Licentiate in Medicine and Surgery, and 8 out of 29 in the Second Examination. On the Degree side the only candidate in the First M. B. Examination passed. In the Second M. B. Examination only 1 appeared, and he failed At the Preliminary Scientific M. B. Examination 3 out of 4 passed. Altogether 49 passed out of 96, compared with 49 out of 115 in the previous quinquennium. In the Preliminary Scientific Examination 47 appeared and 29 passed. In the First L. M. S. and M. B. Examinations 12 passed out of 19, and in the Second L. M. S. and M. B. Examinations 8 passed out of 30; in all, 49 out of 96, or 51 per cent., were successful, as compared with 49 out of 113, or 43 per cent., five years ago.

Engineering.

648. In the First Examination in Civil Engineering 43 candidates appeared and 27 passed, against 14 out of 15 five years ago.

UNIVERSITY EDUCATION.

Arts Colleges.

649. There are now 13 Arts Colleges in the Province within British territory, against 9 returned five years ago; the Victoria College, Lahore, the Church Mission College, Amritsar, the Khálsa College, Amritsar, and the Hindu College, Delhi, were opened during the quinquennium. Five of these Colleges teach up to the Intermediate standard only.

On the whole the number reading in Arts Colleges has increased from 1,101 to 1,244, or by 143. In the First Year Classes there are 424 against 370; in the Second Year Classes 457 against 337; in the Third Year Classes 122 against 162; in the Fourth Year Classes 214 against 208; and in the M. A. Classes 27 against 24.

Oriental College.

650. The Oriental College, Lahore, had 87 on the rolls at the close of the year, against 70 in 1896-97. In the School Department there were 44 against 52. In the school only 10 were preparing for the Entrance Examination. One hundred and six of the students were learning English.

SECONDARY EDUCATION (BOYS).

Number of Schools.

651. The number of Secondary Schools, European and Native, now stands at 351, compared with 291 five years ago. The rise was entirely in the Anglo-Vernacular Schools, including 7 Board Schools, 10 Aided Schools, and 45 Unaided Schools, while the number of Vernacular Schools fell by 2. Of the present total 239 are Anglo-Vernacular Schools and 112 Vernacular Schools against 177 and 114, respectively, in 1896-97. According to grade, there are now 97 High Schools in the Province (95 Anglo-Vernacular and 2 Vernacular) and 254 Middle Schools (144 Anglo-Vernacular and 110 Vernacular), the 60 additional schools comprising 30 High and 30 Middle Schools.

Number of pupils.

652. The number of pupils at the Secondary stage of instruction has risen from 18,013 to 22,188, or by 4,175. In Vernacular Schools the rise is 177 and in Anglo-Vernacular Schools 3,998. At the High stage the number has increased from 2,758 to 3,822, or by 1,064, and at the Middle stage the increase is from 15,255 to 18,366, or by 3,111. In addition to the above, there are 40,390 pupils in the Primary Departments of Secondary Schools against 36,439. Of these, 13,254 against 11,373 are learning English. Altogether, there are 62,578 pupils in attendance at Secondary Public Schools, compared with 54,452 returned five years ago, and of these 30,003 are learning English against 24,089. The number of agriculturists in Secondary Departments is 5,056 against 4,003, and in Primary Departments 9,398 against 8,262. This gives a total of 14,454 agriculturists reading in Secondary Schools against 12,265 in 1896-97.

PRIMARY SCHOOLS (BOYS).

Number of Schools.

653. Altogether there are now 2,257 schools, of which 1,612 are Government and Board Schools, 524 Aided, and 121 Unaided. In 1896-97 the total number of schools was 2,310, which means a loss of 53 Primary Schools during the quinquennium. This decrease is owing to a heavy fall of 102 in the number of Aided Schools (mostly Indigenous), which has been only partly counterbalanced by an increase in the number of Board and Unaided Schools. During the last five years 19 schools were opened in the Lyallpur Sub-Division. The number of Zamíndári Schools is now 184 against 196.

Zamindari Schools.

654. The number of Zamíndári Schools has decreased by 12, and their roll by 789. Of 5 562 boys attending them, 916 were in the Upper stage and 4,646 in the Lower, and 3,610 were sons of agriculturists against 4,484 five years ago. Urdu is the medium of instruction in all these schools, except 7, where Nágri is taught.

Schools for low-caste children.

655. There are now 30 schools for the education of low-caste children, with 665 scholars, excluding the 4 schools in the Gujránwála District, the strength of which has not been reported. In addition to these rudimentary schools there is a High School at Siálkot containing 151 scholars, an Anglo-Vernacular Middle School of 43 boys at Daska specially meant for converts from the sweeper caste. Besides, 126 low-caste boys attend Board Schools, where in some cases they are seated apart from other scholars, but in other cases no such distinction is observed.

TRAINING INSTITUTIONS.

The Central Training College.

656. The number in attendance at the Central Training College at the close of the year was 76, or 6 less than in 1896-97. The decrease is due to the fact that in the year under report the Inspectors sent in Anglo-Vernacular students, whereas in the year under comparison they sent in Vernacular students.

The number of Anglo-Vernacular students has risen from 44 to 46, but there is a decrease of 8 in the Senior Vernacular Class. Most of the students of the latter class had passed the Junior Vernacular Certificate Examination in the First Division. Eighteen out of 20 candidates passed in the

Senior Anglo-Vernacular Certificate Examination, 23 out of 25 in the Junior Anglo-Vernacular Certificate Examination, and 28 out of 30 in the Senior Vernacular Certificate Examination.

Sixteen private candidates also appeared at the Senior Anglo-Vernacular Certificate Examination and 10 passed—2 in the First and 8 in the Second Division. Of the 10 successful students, 6 had previously undergone a year's training in the Junior Anglo-Vernacular Class of the Central Training College, and it is gratifying to note that a yearly increasing number of Junior Anglo-Vernacular students continue their studies after leaving the College, take their degrees, and then present themselves for the Senior Anglo-Vernacular Examination. Thirteen private candidates also appeared at the Junior Anglo-Vernacular Examination, 8 of whom passed—3 in the First and 5 in the Second Division. Of the 7 private candidates at the Senior Vernacular Examination not one was successful. The improvement in the teaching of Drawing noticed in last year's report has been well maintained. Of the 75 students presented in each subject, 57 passed in Freehand, 42 in Model, and 42 in Geometry. Two students gained the Junior Drawing Master's Certificate, and 26 qualified in each branch of the subject. In addition to the above, 15 of the teachers of the Central Model and Normal Schools presented themselves for examination, and succeeded in passing in one or more branches of Drawing.

Normal Schools.

657. At the close of the year under report there were 261 students reading in the five Normal Schools; and, with the exception of one, all were in receipt of Government stipends. Twelve students were under training for work in Zamíndárí Schools; the remainder, 249, for work in ordinary Primary Schools. Sixty-nine were teachers selected for training by Inspectors of Schools, and 192 students who had passed the Vernacular Middle School Examination and desired to become teachers. In 1896-97 there were 270 students in training in these institutions, so that there has been a slight falling off in the numbers.

Of the 299 candidates who presented themselves at the Junior Vernacular Teacher's Certificate Examination, 248 were students of the Normal Schools and 51 were private candidates. One hundred and ninety-nine of the former and 29 of the latter were successful. These figures show that 80 per cent. of the candidates sent up from the Normal Schools passed—a result which is satisfactory. For the Zamíndári Certificate 36 candidates appeared: 18 of these belonged to Central Training College, 14 to the Lahore Normal Schools, and 4 were private candidates. All of the Central Training College students, 11 of those from the Lahore Normal School, and 3 of the private candidates were successful. At Lahore the Normal School students visit the Horticultural Gardens twice a week. Mensuration is also taught practically. Concrete illustrations are used to demonstrate the rules, and the students are required to measure, draw, and estimate the area of fields in the vicinity of the schools.

Training of Female Teachers.

658. Normal Classes for Girls are maintained at the Victoria School, Lahore, the American Presbyterian School, Gujránwála, and at the Alexandra Girls' School, the Christian Girls' School, and the Municipal Board Girls' School, Amritsar. In 1896-97 there were only 10 girls under training. The number has now risen to 35. At the Junior Anglo-Vernacular Certificate Examination six candidates appeared and three passed; at the Senior Vernacular Examination four appeared and one passed; and at the Junior Vernacular Certificate Examination there were three candidates, two of whom were successful. These results show progress, for in 1896-97 there were no candidates at all.

PROFESSIONAL EDUCATION.

The Law College.

659. The Law School at Lahore has now been raised to the status of a College. The staff consists of a whole-time Principal and five Assistant Lecturers or Readers. The decline in numbers still continues, the number on the rolls being 159 against 248 in the previous year and 433 in 1896-97. As attendance at the Law College is, except under special circumstances, compulsory on persons wishing to enter the legal profession in the Punjab, the decline in attendance

clearly points to the diminishing attractions of that profession. The expenditure for the year was Rs. 14,043 against Rs. 10,384 five years ago. Of this, Rs. 12,039 was met from fees, and the balance from other University funds.

The Medical School, Lahore.

660. The Medical School at Lahore had 291 on the rolls at the close of the year against 207 five years ago. This increase has taken place in spite of the fact that for the past two years students have for the first time been required to pay an annual tuition fee, *viz.*, Rs. 25. In the Final Examination for the Hospital Assistant Diploma, held in March, 64 appeared and 28 passed—a ratio considerably below the average. In the Junior Examination for the same diploma 74 appeared and 64 passed.

North India Medical School for Christian Women.

661. The North India Medical School for Christian Women at Ludhiána had 44 students on the rolls at the end of the past year, of whom 14 belonged to the Medical Class, 3 to the Compounders' Class, 11 to the Midwifery Class, and 16 to the Nurses' Class. Of these students, 9 were Europeans or Eurasians, 26 Native Christians, 8 Muhammadans, and 1 a non-Brahman Hindu.

Madrassa Tibbiya.

662. The Madrassa Tibbiya or Yunáni School of Medicine at Delhi had 100 scholars on the rolls at the end of the year against 126 in 1896-97. All but two were Muhammadans. The examination results were satisfactory, and the school continue to do good work. The school has a boarding-house, and the number of boarders on the 31st March, 1902, was 35.

Yunani and Vaidak Classes.

663. The Yunáni Class attached to the Islámiya College, Lahore, had 30 scholars, and the Vaidak Class attached to the Dayánand Anglo-Vedic College 12 scholars on the rolls at the close of the past year.

TECHNICAL EDUCATION.

Mayo School of Art.

664. In the Mayo School of Industrial Art at Lahore there were 302 pupils on the rolls at the close of the year, compared with 304 last year, and 196 in 1896-97. Of the 28 students, who have left during the year, all but two have obtained suitable employment on salaries ranging from Rs. 15 to Rs. 60, 7 are Drawing and Carpentry Masters, 7 are Draftsmen, 2 are Lithographers, 1 is a Litho. Draftsman, 7 are Sub-Overseers, 1 is a Surveyor, 1 is a Label-writer in the Lahore Museum, and 1 is an apprentice in the North-Western Railway.

Railway Technical School.

665. The Railway Technical School, Lahore, had 401 scholars—25 in the Middle Department, 64 in the Upper Primary and 312 in the Lower Primary, compared with 382 last year, or 183 five years ago. More than 75 per cent. of the boys were Muhammadans. All except 38 belonged to the artisan class, and were charged no fees. Most of the artisans whose sons attend are employed in the North-Western Railway Workshops. Fee receipts amounted to Rs. 295, compared with Rs. 293 last year, and Rs. 58 only in 1896-97. The expenditure for the past year was Rs. 8,718 against (Rs. 8,610 last year) Rs. 6,884 in the year under comparison, or Rs. 1,834 more. At the close of the year 38 Lord Lawrence Scholarships were current.

Industrial Schools.

666. Besides the Railway Technical School, the following Industrial Schools are returned:—

Municipal Board Industrial School, Amritsar; Municipal Board Industrial School, Delhi; District Board Industrial School, Ludhiána; Victoria Diamond Jubilee Hindu Technical Institute, Lahore; Evening Classes, Victoria Diamond Jubilee Hindu Technical Institute, Lahore; Technical Classes, Dayánand Anglo-Vedic College; Sozankári Schools, Gujrát; Christian Boys' Boarding School, Ludhiána; Clark-abad Orphanage; St. Francis' Orphanage, Lahore; Boys' Industrial Home, Gujránwála; Industrial School, Gurgaon.

Clerical and Commercial Classes.

667. Of these the most important are those maintained by the Amritsar Municipal Committee. The total number in attendance at the end of the past year was 36,—28 in the Senior Class and 8 in the Junior; of these 18 were

learning *Shorthand*. The total expenditure was Rs. 3,660, of which Rs. 1,052 was met from fees, against Rs. 4,348 and Rs. 1,112, respectively, last year. For a time these classes were amalgamated with the Municipal Board High School, Amritsar, with the result that the tuition in them as well as in the ordinary school classes suffered considerably, while the staff and appliances were not sufficient. Since June 1st, 1902, these classes have, however, been separated from the Municipal Board School, in the hope that they will produce better results as a separate institution. Similar classes were started in May 1900, in connection with the Municipal Board High School, Hoshiárpur. At the close of the past year the Senior Class had 8 boys and the Junior 4. In the Entrance Examination of the Punjab University 7 out of 16 passed the Clerical and Commercial Examination. In the class started in connection with the Municipal Board School, Rewári, there were only 3 scholars on the rolls, and the progress made was not sufficient. Commercial Classes were also recently opened in the Brandreth High School, Gujránwála, and the Mission School, Ráwalpindi.

Female Education.

Number of Schools and Pupils.

668. In European and Native Girls' Schools together there were 360 Public Schools against 347 in the previous quinquennium, with 15,178 pupils against 13,139. To these may be added 11,258 girls reading in Private Schools and 144 reading in Special Schools, making a total of 26,580 girls under instruction in the Province compared with 19,228 returned five years ago. The number of Government and Board Public Schools has increased by 2, that of Unaided Schools by 14, while there are 3 fewer Aided Schools. Of the girls in Public Schools 1,734 against 1,616 were learning English, 287 being Natives and 700 were scholarship-holders, against 846. At the Secondary stage of instruction (622 against 609) there is only a slight change; but at the Primary stage there are 14,556 against 12,530.

Education of Particular Classes.

Europeans.

669. There are now 37 Public Schools against 34, with 2,451 pupils against 2,397, or 54 more than in 1896-97. Of these 16 are Boys' Schools with 1,010 pupils and 21 Girls' Schools with 1,441 pupils. Of Private Schools there are only 6 against 13, with 122 pupils against 203; 1 is for boys and 5 for girls. The total number at school is, therefore, 2,573, compared with 2,600 in the previous quinquennium; of these 1,019 are boys against 1,210, and 1,554 girls against 1,390. Of the Public Schools 14 are High (one being Unaided), 19 Middle, and 4 Primary, compared with 10, 20, and 4 schools, respectively, five years ago. The number of pupils at the Secondary stage of instruction has declined from 854 to 743, or by 111, but there is a rise of 165 at the Primary stage.

In the Entrance Examination of the Punjab University two candidates appeared and passed—one from the Boys' High School, Lahore, passed in the Science Faculty, and the other from the St. Anthony's High School, Lahore, on the Arts side. In the Entrance Examination of the Calcutta University, Bishop Cotton School, Simla, sent up 4 candidates who all passed against 18 out of 20 in 1896-97, and St. Denys' School, Murree, sent up 1 girl, but she failed.

In the High School Examination 39 passed out of 51, or over 76 per cent., against 15 out of 33, or over 45 per cent., in 1896-97. In the Middle School Examination 83 passed out of 151, or over 54 per cent., against 79 out of 83, or over 95 per cent., five years ago. In the Primary School Examination 231 passed out of 281, or over 82 per cent; compared with 257 out of 259, or over 99 per cent., five years ago.

Muhammadans.

670. The number of Muhammadans under instruction has, during the past five years, risen from 109,002 to 111,350, or by 2,348. At the same time Hindús have risen from 103,926 to 106,938, or by 3,012, and Sikhs from 22,821 to 23,008, or by 987. In Public Schools the number of Muhammadans, boys

and girls together, has increased from 65,449 to 68,674, or by 3,225, there being now 64,569 boys against 61,280, and 4,105 girls against 4,169. In Private Schools there has been a fall of 877 pupils, the numbers being 35,157 boys against 38,999 and 7,519 girls against 4,554. The number of Muhammadan boys in schools of all kinds is now 11·55 per cent. of those of school-going age against 12·75 in 1896-97; in the case of Hindu boys, the percentage is 15·45 against 15·73; and in the case of Sikhs it is 15·98 against 17·51. In schools for girls the percentage of attendance is now 1·53 for Muhammadans against 1·26; 1·48 for Hindús against 1·22; and 2·56 for Sikhs against 2·01: this is some ground for satisfaction.

Native Chiefs, &c. The Aitchison College.

671. The number on the rolls of the Aitchison College at the end of the past year was 64, or 4 more than in 1896-97, or 2 more than last year. Of these 1 read in the Fourth Year Class of the Government College, Lahore, 17 in the High, 21 in the Middle, 16 in the Upper Primary, and 9 in the Lower Primary Departments. Of the 64 students, 36 paid fees, and 28 were scholarship-holders. The general management of the College continues to be excellent, the instructional work of the school is good on the whole, and the examination results are satisfactory. Two boys were selected for the Imperial Cadet Corps. The receipts for the year amounted to Rs. 1,16,265 (including a Government grant of Rs. 9,000), compared with Rs. 59,746 last year. The disbursements were Rs. 93,805 against Rs. 63,299 in the previous year, and the closing balance Rs. 22,460.

Pupils in Private Schools.

672. Schools which do not conform to the standards prescribed by the Department or the University, and submit to no public test, are classed as Private Schools. They are chiefly Indigenous Schools consisting of (1) Advanced Schools teaching the Oriental Classical Languages; (2) Mahájani Schools teaching Commercial Arithmetic according to Native methods; (3) schools teaching mainly a Vernacular; and (4) a few "Other Schools" started by private persons as a means of earning a living, or opened by Missionaries for the benefit of low-caste children. Six schools for Europeans, with 122 pupils, are also included in the last sub-head, against 13 schools and 203 scholars in the year 1896-97.

MISCELLANEOUS.

Education in Native States.

673. The number of Arts Colleges in Native States continues to be 3. These are at Patiála, Bahâwalpur and Kapurthala, with 92 students against 113 five years ago. Of the 230 Public Schools, 49 are Secondary Schools, with 7,521 pupils, 173 are Primary, with 6,001 pupils, and 8 are Special, with 153 pupils. This gives a total of 13,675 pupils, compared with 13,004 in the previous quinquennium. The number of Private or Indigenous Schools is 859 against 797, with 8,510 pupils against 8,980. In both Public and Private Institutions the number now under instruction is 22,277, of whom 1,675 are girls, compared with 22,097, of whom 1,498 were girls, in 1896-97. The number learning English is 3,569. The total male population of these States is 2,064,072, so that 1 in 93 is under instruction.

Discipline and Moral Training.

674. The improvement in the discipline of schools noticed in last year's report continues. In Private Schools not observing inter-school rules discipline is still far from satisfactory. It is, however, confidently hoped that the new rules of recognition which have recently been issued by the Education Department will have a very wholesome effect upon the discipline, efficiency, and general tone of the schools of the Province. In all the Colleges the conduct of the students was uniformly good. All the Colleges are fully alive to the importance of the moral training of their students. Most of them have Literary or Debating Societies of their own, and these have met regularly during the year. In the Central Training College there is, in addition, a Shakesperian Society, and in the Forman Christian College a Temperance Association, but the latter has not been quite so active as in previous years. The Forman Christian College, the Government College and the Central Training College have now got their respective Graduates' or Old Students' Associations.

In denominational Colleges moral instruction is given regularly along with religious instruction to every student. In schools all the agencies for the formation and improvement of character noted in last year's report continue to be employed; and, indeed, they now exercise a wider influence than in the past. In the Lahore and Amritsar Districts, owing to the prevalence of plague, the Teachers' Associations did not meet regularly.

Physical Training.

675. Physical training continues to receive particular attention both in the Schools and Colleges of the Province; much, however, still remains to be done.

Boarding-Houses.

676. At the close of the year there were, for Natives and Europeans, 303 boarding-houses, with 10,257 inmates. Of these 281 houses were for males, with 8,875 in residence, and 22 for females, with 1,382 in residence. For Europeans there were 20 houses, with 1,434 residents, 8 for boys, with 593 inmates, and 12 for girls, with 841 inmates. Of the total number of houses 11 are managed by Government, 176 by Local Bodies, 35 aided by Government or Local Bodies, and 81 are unaided.

Text-Books.

677. To secure the more active co-operation of members not resident in Lahore it was decided to establish Branch Text-Book Committees at Delhi and Pesháwar, and, if possible, at Jullundur. Those at Delhi and Pesháwar have already been formed.

The work of the past year may be summarized as follows:—A Manual of School Management for Normal Schools has been completed and approved; new schemes of Object Lessons for Primary Schools and Courses of Reading in Mensuration for Middle Schools have been drawn up; the list of books recommended for School Libraries has been thoroughly revised; a Chart to illustrate Geographical Terms has been prepared and made over to the Contractors; a Manual of Mensuration for Primary Schools has been written; thirteen Wall Maps of Districts and twelve Maps to accompany District Geographies have been revised; the Geography of the Punjab and the North-West Frontier Province has, as far as possible, been brought up to date; lessons in Modern Persian have been inserted in the Persian Readers; arrangements have been made for the issue of a number of cheap Story Books, the preparation of Manuals on Kindergarten, Arithmetic, and Sanskrit; the translation of certain songs and of *Tandrusti ke Asán Qáide* into Panjábi and the revision of Geographies and Maps with a view to bringing these publications up to date; a complete set of sight-testing apparatus and models of animals prepared in the School of Art have been added to the Museum; 100 volumes have been added to the Reference Library; over 200 text-books have been considered by the various Sub-Committees; and eight lakhs of books have been embossed and numbered.

Literature and the Press.

Literature.

678. The table below shows the books published in the principal *languages* during the past decade, but it shows rather the books published in the different written characters, and illustrates not so much the polyglot character of the Punjab population as the diversity of the scripts to which its literate members are subject. To acquire an intimate knowledge of Punjabi literature one would have to learn to read Persian, Sanskrit, Gurmukhi, Mahájani and their variants, in addition to learning the various languages and their dialects. For example, we find Urdu books published in four written characters, Persian, Nágri, Roman and Gurmukhi, and Punjábi in eight, including these four, and Sindhi, Mahájani, Lande and Arabic. On the other hand, we have Hindi and Sindhi books printed in Gurmukhi. Of the written languages Urdu is the favourite, some 47 per cent. of the books published being in that tongue. Punjábi comes next with about 20 per cent., then English with nearly 7 per cent., and Hindi with 4 per cent. of the published works. The subjects covered by those books, which are those registered under the Act (XXV of 1867), are of very different degrees of importance. A large proportion of the works are educational, and this especially applies to the English and Urdu publications. Taking the

essentially indigenous books in Punjábi, Persian, Hindi and Sindhi one is struck by the number of works on poetry and religion. As a rule, the literary activity of the Muhammadan writers is centred on religious works, and Islám usually publishes each year more books on religious questions than all the other religions put together. The books in Punjábi are mainly poetical, as are those in Hindi and Sindhi. It is a little disappointing to find that the literary efforts of Hindúism are limited, for the most part, to mere recensions of the older works on mythology and legend, or to controversial works on social questions, such a infant marriage, widow remarriage and the like. The Sikhs, in proportion to their numbers, show greater activity, and there has been a strong separatist movement in the past decade advocating the abandonment of Hindu customs :—

Urdu ...	5,763	Hindi ...	466
„ (Nágri) ...	59	Persian ...	400
„ (Gurmukhi) ...	93	Arabic ...	376
Punjábi (Gurmukhi) ...	1,424	Sindhi ...	303
„ (Persian) ...	981	Hindi (Persian) ...	109
English ...	768	Sanskrit ...	110

The total number of books published in the decade was 12,448. Of those not included in the foregoing figures the most were published in biglot form.

Statistics of newspapers.

679. There were 186 neswpapers published in the Punjab during the year 1901. Of these, 35 were published in English, 137 in Urdu, 7 in Hindi, 4 in Gurmukhi, 1 in Sindhi, and 2 partly in English and partly in Urdu and Gurmukhi. Thirty-one Vernacular and 5 English newspapers were started and 37 ceased to exist during the year, leaving a total of 149 on the register. Of the 31 Vernacular newspapers started, 8 ceased to exist during the year. One was published yearly, 2 quarterly, 59 monthly, 25 twice a month, 2 three times a month, 86 weekly, 4 bi-weékly, and 1 tri-weekly. There were six daily newspapers.

Prosecution.

680. Karím Bakhsh, Proprietor and Editor of the *Anwar-ul-Islám*, a religious journal published monthly at Siálkot, was prosecuted during the year for publishing a grossly obscene article. The Magistrate who tried the case, while convicting him under Section 292, Indian Penal Code, merely ordered him under the provisions of Section 562, Criminal Procedure Code, to enter into his own recognizance in the sum of Rs. 100 to appear and receive sentence when called on, and in the meantime to keep the peace and be of good behaviour for the period of one year.

LITERARY SOCIETIES.

General Remarks.

681. There is an appreciable increase in the number of registered Literary Societies as compared with the earlier period. Lahore and Amritsar continue to be the leading centres of such Associations. Unregistered Societies are springing up everywhere. Most of the Societies are primarily religious and meant for the advancement of the interests of the particular communities they represent. On the other hand, Societies like the "Punjab Public Library," the "Punjab Text-Book Committee," the "Indian Association," and the "Punjab Association" are established on a broader basis. Their members include individuals of all classes and denominations and their usefulness is not cramped by any sectarian limitations.

Principal Societies.

682. The following important Societies, both registered and unregistered, may be briefly mentioned :—

The Sat Sabha, Lahore.

This was established in 1866 with a view to impart the elementary truths of Western knowledge through the language of the people—Punjábi. The religious and social advancement of the Hindús was another aim. During the last decade, however, its influence has been on the wane.

Anjuman-i-Islamiya.

This Society was founded in 1869 with the object of interpreting the measures of Government concerning the Moslem community, and to lay before the Government the views of Muhammadans.

Guru Singh Sabha, Lahore.

This Society was established in 1879. Its main functions are, to represent the interests of the Sikhs, to encourage the Punjábi language, and to maintain the original purity of Sikh doctrines and customs.

Arya Samaj, Lahore. This Samáj came into existence in 1879. Its chief aim was to give new life to the religion of the Vedas and to popularise the study of Sanskrit literature. It has a College of its own which was described in the Report of 1893 as "one of the most interesting educational enterprises in Northern India." It has since been raised to the first grade. The Society has suffered from internal dissensions, and is now split up into two parties.

The Khalsa Diwan, Lahore. This Society was established in 1883. Its main objects are, the diffusion of useful knowledge among the Sikhs; the improvement of Punjábi literature; the advancement of female education; the religious instruction of Sikh youths, &c., &c. The Khálsa College movement which had a very promising beginning has resulted in the establishment of a College. Its efficiency, however, has suffered from want of harmony in the working of the Managing Committee.

The Indian Association, Lahore. This Society was founded in 1883 with the purpose of advocating the cause of political advancement and social reform.

The Punjab Association, Lahore. This Association is a branch of the "National Indian Association of London," and was established in 1886. The objects of this Society are:—(*a*) Advancement of Female Education; (*b*) the encouraging of friendly intercourse between Englishmen and Indians Its organ, the *Punjab Magazine*, a monthly journal, though it is still published, has lost much of its former vitality.

Anjuman-i-Himayat-i-Islam, Lahore. This Anjuman was organised in 1886. Its chief aim is to give Moslem youths a good grounding in the principles of their religion along with secular instruction, and to support orphan and destitute children. To this end it maintains a flourishing school with College classes and an Orphanage. It also publishes text-books for Islámiya Schools.

The Punjab Science Institute. This Society was founded in 1886, mostly through the exertions of Professor J. C. Oman. Its aim was to promote the cause of scientific learning and practical education in this Province. It is to be regretted, however, that of late years the Society has been in a state of stagnation.

The Sanatan Dharam Sabha, Lahore. This Society was established in 1890 with the view of imparting systematic religious instruction to Hindu youths in accordance with the teachings of the Sanátan Dharam. It has a High School and an advanced Sanskrit Páthshála. For a time the management was lax, but steps are being taken for its improvement.

Anjuman-i-Khadim-i-Ulum-i-Islamiya, Lahore. This Society was founded in 1888 for the encouragement of Arabic learning. It maintains a thriving "Maktab" under the charge of well-read Maulavís who teach their pupils in the old Muhammadan way.

Anjuman-i-Islamiya, Amritsar. This Anjuman was established in 1874. Its objects are to promote the cause of religious and secular education among Muhammadans, and to look after their social and political well-being. Its High School is in a flourishing condition.

Hindu Sabha, Amritsar. This Sabha was founded in 1880 with the special object of reviving the study of Sanskrit. It has a prosperous High School of its own.

The Khalsa Tract Society, Amritsar. This Society was established in 1890 with the view of conveying the simple truths of Sikhism in the Punjábi language. Social reform was another aim. These tracts may help towards the formation of a prose style at once simple and forcible.

The Jullundur Arya Samaj. This Samáj was established in 1885. Its chief object is the diffusion of the Vedic religion. It has given a new impulse to the study of Sanskrit. Female education and the amelioration of the condition of women are other aims of the Samáj. A High School for boys and a well-equipped Middle School for girls called the "Kanniya Maha Viddiyála" are maintained by this Society.

Sanatan Dharam Sabha, Hoshiarpur. This Sabha was founded in 1889, with the purpose of awakening an intelligent interest in the study of ancient Hindu religion. It maintains a good Sanskrit Páthshála of the old type and a well-attended High School.

The Delhi Literary Society.

This is the oldest institution of its kind, and was founded in 1865. Its main objects were the advancement of learning and science, and the encouragement of social and intellectual intercourse. At one time this association wielded considerable influence, but signs of decay have been apparent for some years, and is now merely a recreation club.

Arya Samaj, Rawalpindi.

This is the oldest of the Punjab Arya Samájes, and was founded by Swami Dayánand Saraswati himself in 1877. Its aim was to promote the study of Sanskrit and to bring people back to the purer religion of the Vedás as distinguished from that preached by the Puráns. It maintains a prosperous High School for boys and a Primary School for girls.

Arts and Sciences.

LAHORE CENTRAL MUSEUM.

Attendance.

683. The total number of visitors during the year was 222,995 and the daily average was 611 against 221,085 and 605 respectively in the previous year.

Zenana day.

684. A new feature has been the institution of a zenána day. At a meeting held in June the Committee decided to close the Museum to the general public for one day in each month and admit women only in order to give the pardánashín an opportunity of making themselves acquainted with the institution from which they have previously been debarred. This new arrangement commenced in November, and during the five days on which it has been opened the total number of women passing the turnstile has been 1,392. A staff of female attendants has been provided, supervised by a lady superintendent, who also gives assistance to the visitors by explaining any specially interesting object or process. I understand that this new feature is much appreciated, and that the whole arrangement promises to be a success.

Additions (antiquities).

685. These include among others two inscribed stones found in the Shahrig Tahsíl, District Thal-Chotiáli, in Baluchistán, and a Buddhist seal found in a stream in Kutchi in the Kelát territory. Paper impressions of these have been forwarded through Dr. Vogel, the Archæological Surveyor, Punjab Circle, to M. E. Dranin Rue Vernenil, Paris, for identification. Some pieces of Buddhist sculptures obtained from Malákand were also forwarded to the Lahore Museum. A few bricks, fragments of pottery, and other objects found in the Jhang District were presented by the Deputy Commissioner of that place. The attention of the Archæological Surveyor was called to these various remains, with the result that further investigations have taken place in this district. The inscription on one of the Buddhist sculptures from Charsadda presented last year by the Deputy Commissioner, Pesháwar, has been read by Dr. A. W. Stratton, Registrar, Punjab University. This stone is particularly interesting on account of the date recorded, which Dr. Stratton reads as "Wednesday, the 4th of the month of Asadha in the year 179, presumably of the Vikrama era." It is noteworthy that the only inscribed pieces of Gandhára sculptures previously found came from the same neighbourhood. An interesting addition to the Entrance Hall has been a fine carved wooden doorway from an old house in the City of Lahore. It is in the style known locally as "Akbari," of which a few other examples only are to be found in some of the back courts and lanes in the heart of the city.

Museum building and collections.

686. Two large antique pillars and three bases have been erected on suitable platforms made of masonry. This work has been carried out with the assistance of the Executive Engineer, Lahore. A case for the centre of the sculpture gallery has also been made and fitted up. The numbering and arranging of the stones in the wall cases is now quite complete. In connection with the new arrangement of the economic section Dr. George Watt, the Reporter on Economic Products at the Indian Museum, and his Assistant, Mr. Burkill, came at the invitation of the Committee to initiate a plan for proper exposition of the various collections in this section. Plans for the arrangement of the

cases had already been drawn up, and these with some minor alterations were approved by Dr. Watt. They were to some extent on the same lines as those now in use in the Indian Museum. Acting on the advice of Dr. Watt, the Curator obtained permission to visit that institution and was thus enabled to see exactly the kind of system that is found so successful there, and which it is proposed to adopt at Lahore. Everything is now in readiness to commence the actual work as soon as the arrangements with regard to the annual grant are completed.

Art Sale Room.

687. The sales effected in this department during the year amounted to Rs. 1,596-2-0, or Rs. 801-4-0 more than the previous year. The amounts realized in this department during the last five years are as follows:—

1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
2,155 0 0	2,886 4 9	1,586 8 0	794 14 0	1,596 2 0

It will be seen that the turn-over varies considerably from year to year, and this seems to depend on no particular cause. Four years ago the demand for printed cottons was greater than the supply, but this year a very good collection of samples was returned as there was no market. The principal sales during the year under report have been in carved woodwork.

CHAPTER VIII.

ARCHÆOLOGY.

688. During the year the Archæological Surveyor was chiefly engaged in advising on the archæological or historical importance of various buildings and monuments in the Punjab, and on the measures to be taken for their preservation. Several ancient edifices, which up to the present have been misused, are intended to be restored, such as the Chhoti Khwábgah, the Moti Masjid and Dewán-i-Am in Fort Lahore, the first of which is used as a church, the second as a treasury and the last named as a dormitory; and the Mosque of Dái Anga (now used as the Traffic Superintendent's Office, North-Western Railway) near the Lahore Railway Station. These buildings will probably be evacuated during the course of the coming year, and in future maintained as ancient monuments. At Delhi negotiations have been opened with the owner of the tomb of Azam Khán, which it is proposed that Government should take over and restore. Restoration to original use of ancient religious edifices.

689. Amongst works of preservation special repairs were executed to the gateway between Jahángír's enclosure and the adjoining *Sarai*, to the Shálamár Bágh, and Jahángír's Tomb at Shahdara. In the way of restoration, the missing or broken parts of the marble mosaic on the façade of the mosque of Sher Shah at Indrapat have been replaced, and the sandstone railing round the platform of the Tomb of Humáyún was completed. The special works of preservation or restoration executed during the year are, however, few compared with the great number of buildings which are in want of repairs. Preservation of buildings.

690. As to archæological research, tours were made in the Kángra District, in the Kulu Valley and other places in the Province, and a large number of photographs were taken and several rock cut inscriptions deciphered. Archæological tours.

691. The completion of the list of archæological remains in the Province was taken in hand and a commencement made with the three most important centres of Muhammadan architecture in the Punjab,—Delhi, Lahore and Mooltan. The lists previously prepared have been found to be often inaccurate, and a good many monuments of archæological interest are not entered in them. Lists of archæological remains.

CHAPTER IX.

MISCELLANEOUS.

ECCLESIASTICAL JURISDICTION.

See of Lahore.

692. The Punjab which was originally included in the See of Calcutta, was, by Royal Letters Patent, constituted a separate Diocese in December 1877, and the Right Reverend T. V. French, D. D, was appointed its first Bishop, with the style and title of "Bishop of Lahore." At the end of 1887 Bishop French resigned the See, and on the 6th of January 1888 the Venerable Henry James Matthew, D D., Archdeacon of Lahore, was consecrated in Westminster Abbey Bishop of Lahore. Bishop Matthew died in December 1898, and the Reverend George Alfred Lefroy, D. D., formerly head of the Cambridge Mission, Delhi, was consecrated Bishop by the Bishop of Calcutta and four other Bishops in the Cathedral at Lahore on the 1st of November 1899. The See of Lahore as constituted by Letters Patent includes the Punjab, the recently created North-West Frontier Province, and the Province of Sind, which was formerly a part of the Bombay Diocese. The Bishop also exercises Ecclesiastical jurisdiction in Kashmir. With the extension of British Military occupation on the South-West Frontier the Ecclesiastical jurisdiction of the Bishop has also extended to Quetta and other places in Southern Balúchistán occupied by British troops. Like all other Indian Sees, the Lahore See is subject to the authority of the Bishop of Calcutta as Metropolitan. By authorization of the Letters Patent an Archdeacon is appointed by the Bishop from the Senior Chaplains, who exercises Archidiaconal jurisdiction within the limits defined above.

Ecclesiastical.

Church of England.

693. Chaplains on the Bengal (Lahore) Ecclesiastical Establishment are posted at the following stations:—

Delhi.	Siálkot.
Ambala.	Ráwalpindi.
Simla.	Ráwalpindi, West Ridge.
Jullundur.	Abbott-abad.
Amritsar.	Nowshera.
Dalhousie.	Peshâwar.
Lahore	Murree.
Meean Meer.	Dera Ismail Khan.
Ferozepore.	Mooltan.

Chaplains are also posted to Kasauli, Subáthu and Dagshai; but, owing to the large number of hill stations in the Punjab, the Chaplains for these stations are selected as follows:—

For Kasauli and Subáthu, from the Chaplains of the Diocese of Calcutta; and for Dagshai, from the Chaplains of the Diocese of Rangoon.

A Chaplain from the Diocese of Lahore is every third year deputed to Kashmir, from the 1st of May to the 30th of September, the Bishop of Calcutta and the Bishop of Lucknow nominating for the two intervening seasons. A Chaplain is usually placed in charge of the Military Camps lying between Dungagali and Murree for the same period.

The Chaplains in Sind are three in number, and, though belonging to the Lahore Ecclesiastical Establishment, are borne on the roll of the Bombay Establishment. Two of these are stationed at Karáchi, and one at Hyderabad. A Chaplain is also stationed at Quetta. If numbers admit of it, there are two Chaplains there, but owing to the paucity of Chaplains it is seldom possible to allow more than one for that station.

Besides these Chaplains on the regular establishment, the Additional Clergy Society maintains Clergymen at Lahore (Railway District), Jhelum, Sukkur (in Sind) and Dharmsála. The ministrations in these stations are largely, and at Lahore exclusively, on behalf of Railway employés. All these Clergymen receive allowances from Government (as grants-in-aid) and from other funds raised by the Additional Clergy Society.

Lahore Cathedral.

694. The interior of the Lahore Cathedral was completed in 1892. Externally there remain to be added the two western towers, which it is computed will cost about Rs. 30,000 each. The Cathedral compound has been laid out and a proper enclosure and gates supplied.

Church of Scotland.

695. The Punjab forms part of the "Presbyterial Body of the United Provinces of Agra and Oudh, Central India, Punjab, Chamba and any adjacent States in which there are Missions of the Church." The Presbyterial Body consists of all Chaplains, Acting Chaplains, Ordained Missionaries and other ministers holding appointments of the Church, the two senior ordained native Missionaries or Pastors, and a representative elder from every European Kirk Session and from every Native Kirk Session whose Pastor is a member of the Body. The Chaplaincy work of the Punjab is under the direction of the Presidency Senior Chaplain of Bengal. Chaplains or Acting Chaplains are stationed permanently at the following stations:—

Ráwalpindi.	Delhi (visited).
Siálkot.	Murree and Galis (summer only).
Lahore and Meean Meer.	Dalhousie (summer only).
	Kasauli (summer only).

Services for Church of Scotland troops are arranged for at Pesháwar in the absence of a Chaplain. When a Scottish Regiment is posted to any other station in the Punjab, a Chaplain attached to the Regiment usually accompanies it. The Church of Scotland Punjab Mission was founded in 1857, and carries on work at Siálkot, Jammu (Kashmir), Gujrát, Wazírabad, Daska, Chamba and Jalálpur. The Women's Association for Foreign Missions has Missions at Gujrát, Siálkot and Chamba.

Roman Catholic Church.

696. In 1880 that portion of the Punjab extending northwards from the River Sutlej (inclusive of Ferozepore) was formed into a Vicariate separate and distinct from that of Hindustán, and the Right Reverend Dr. P. Tosi was appointed Bishop and Vicar-Apostolic of the Punjab. In 1886 that same portion of the Punjab was constituted a Diocese under the title of the Diocese of Lahore. The boundaries of the Diocese of Lahore on the north are the districts of Bannu, Jhelum and Nowshera and the State of Kashmir, but includes the Native State of Chamba and the Kángra District. On the west it extends to the confines of Afghánistán and Balúchistán, comprising the districts of Muzaffargarh, Dera Gházi Khan and Dera Ismail Khan and the Native State of Baháwalpur. It includes under its jurisdiction the Native State of Farídkot, and has for its southern limits the Province of Rájpútána and extends as far as the boundaries of the Patiála State and the Ambala District. On the east it

comprises the districts of Kángra, Kulu, Spiti as far as the river Sutlej, and includes the Native States of Mandi and Suket. The Right Reverend Dr. Godfrey Pelckmans was nominated Bishop of Lahore on the 2nd June 1893, consecrated on the 13th August 1893 at Simla by His Grace Dr. E. Vanden Bosch, Archbishop of Agra, and was solemnly enthroned in his Pro-Cathedral of Lahore on the 20th of August 1893.

Prefecture Apostolic of Kashmir and Kafiristan.

697. The Prefecture Apostolic of Kashmir and Káfiristán was erected as a separate Ecclesiastical charge by the Holy See on the 6th of July 1887. It comprises the districts of Ráwalpindi, Jhelum, Bannu, Kohát, Pesháwar and Hazára, together with the northern trans-frontier countries and the Kashmir territories. The Prefect Apostolic appoints Military Chaplains to the following stations:—Ráwalpindi, West Ridge, Murree, Murree Galies, Pesháwar, Nowshera and Cherát. Besides these Chaplains who receive pay from Government, the Prefecture maintains three additional Chaplains, who receive no grant or allowances from Government,—*viz.*, one at Ráwalpindi for Railway employés, one at Srinagar, and, during the summer season, one for the Military Camps near Murree.

Institutions under the jurisdiction of the Prefect Apostolic are:—

(1) The Convent of Jesus and Mary, Murree, with a High Class Boarding School for young ladies and a 2nd Class Boarding School and Orphanage for Girls.

(2) St. Thomas' College and Orphanage for Boys, Murree.

(3) The Presentation Convent with a Day School, Ráwalpindi.

(4) St. Joseph's Orphanage for Native Boys.

(5) St. Mary's Orphanage for Native Girls.

Roman Catholic Chaplains in Lahore diocese.

698. Chaplains acting within the jurisdiction of the Roman Catholic Bishopric of Lahore are posted at the following stations:—

Lahore.	Ferozepore.
Meean Meer.	Siálkot.
Amritsar.	Mooltan.
Jullundur.	Dalhousie.

Besides these Chaplains there are two or more resident Missionaries with Churches, Schools and Dispensaries for the poor in the following places:—*viz.*, Adah in the Siálkot District, Sahowála in the Siálkot District, Maryabad in the Gujránwála District, and Khushpur in the district of Jhang.

Roman Catholic Chaplains in Agra diocese.

699. The Vicariate Apostolic of Hindustán with its Episcopal See at Agra was constituted an Archdiocese by the Holy See on the 1st September 1886. Within its boundaries are included the Delhi Division, the Cis-Sutlej States, and the Simla Hill States. His Grace the Archbishop deputes Chaplains to the following stations:—

(1) Ambala (2 Chaplains).	(5) Dagshai.
(2) Kasauli.	(6) Solon.
(3) Simla.	(7) Delhi.
(4) Jutogh.	(8) Subáthu.

Missions: Church Missionary Society.

700. The Missions established in the Punjab in 1851, on the arrival of the late Reverend Robert Clark, M.A., by the Church Missionary Society may geographically be divided into two sections,—the long Frontier line of Missions from Simla to Karáchi, and the chief Central Missions in and around Amritsar and Lahore, which are the pivot of the whole work. The former section comprises Simla, Kotgarh, Kángra, Kashmir, Pesháwar (with out-stations at Hazára and Abbott-abad), Bannu, Dera Ismail Khan, Tánk, Dera Gházi Khan, Mooltan (with its out-stations at Baháwalpur, Shujabad and Muzaffargarh) and Quetta, and flanked quite down to the sea by the Sind Mission in Sukkur and Hyderabad and Karáchi.

Central Mission.

701. The Central Mission has stations at Amritsar, Sultánwind, Clarkabad, Jandiála, Nárowál, Batála, Ajnála, Bahrwál, Tarn Táran, Lahore and Pind Dádan Khan.

Zenana Mission.

702. The Church of England Zenana Missionary Society has stations at Amritsar, Batála, Fathegarh, Nárowál, Ajnála, Bahrwál, Tarn Táran, Jandiála, Majítha, Kashmir, Pesháwar, Dera Ismail Khan, Dera Gházi Khan, Sukkur, Hyderabad and Karáchi.

S. P. G. Mission.

703. The Society for the Propagation of the Gospel has a Mission in the south of the Punjab, with its head-quarters at Delhi, and also ordained Missionaries at Karnál and Rewári.

Cambridge Mission.

704. A body of Clergymen, ten in number, known as the Cambridge Mission, superintends the work of the above Mission, including a branch at Rohtak. The Cambridge Mission has established a College at Delhi, which teaches up to the B. A. Standard of the Punjab University, and receives a grant-in-aid from the Local Government.

American Presbyterian Mission.

705. The American Presbyterian Church began operations in the Punjab in 1832, its first station being Ludhiána. In 1849 Messrs. Newton and Forman began work in Lahore. The following stations and districts in the Punjab are occupied by the Mission:—Ludhiána, Lahore, Ferozepore, Jullundur, Hoshiárpur, Subáthu, Ambala, Kasúr, Khanna and Jagraon. Ani (in Kulu) and Santokh Májra are in charge of an itinerant Missionary. There are in connection with the Mission 18 ordained foreign Missionaries and 6 Medical Missionaries, of whom 4 are ladies. There are, in addition to the above, 15 lady Missionaries, and 22 ordained Native Ministers are connected with the Mission. The Mission has a College at Lahore which teaches up to the M. A. Standard of the Punjab University, and has 368 students in attendance. This institution receives a grant from Government. It has also important educational work in the Boys' Boarding School at Ludhiána and the Girls' School at Hoshiárpur for the benefit of the Indian Christian community. In addition to these there are High Schools for the general public at Lahore, Jullundur, Ludhiána and Ambala.

Methodist Episcopal Mission.

706. In March 1881 the Methodist Episcopal Mission (U. S. A.) was first established at Lahore, and in August 1883 the foundation of an English Church was laid. On the 29th May 1884 the building was completed and dedicated for Divine Worship. The cost of the site and building amounting to over Rs. 10,000 was met by voluntary contributions and a subsidy by the American Mission Board. This Mission has extended its boundaries during the past few years. In 1890 it opened out work at Patiála under a staff of Native Missionaries. In 1891 a Mission Station was established at Delhi under the supervision of a resident European Missionary; and in 1892 several minor Mission Stations were opened in important centres around Lahore, such as Shahdara, Begamkot, Kotla, &c. In Mooltan also a Mission Station has been established very recently with a resident European Missionary; also one at Amritsar with a resident Native Pastor. The Mission is presided over by Bishop F. W. Warne, Bishop of the Methodist Episcopal Church of India and Malaysia. The Native branch of the work is supported by the American Mission Board, but the English work among the European and Anglo-Indians is, to some extent, self-supporting.

Other Missions.

707. To the Missions named above may be added the following:—

The Moravian Mission at Kelang in Lahul and Pu on the Sutlej and at Chini and Simla.

The American United Presbyterian Mission in the Gujránwála, Gurdáspur and Siálkot Districts.

The Baptist Missions at Delhi and Simla.

The Zenana Bible and Medical Mission; has stations at Lahore and Kasúr, in the Lahore District.

The work of the Society in the Punjab is in connection with the American Presbyterian Church. There are 8 lady Missionaries. A large and influential boarding school for girls is conducted at Lahore.

Schools, Religious Institutions, &c., Church of England.

708. The following are the principal Educational Institutions which are Diocesan, or in which the religious teaching is that of the Church of England :—

(1) Lahore Divinity College, Church Missionary Society.

(2) The Lawrence Asylum, Sanáwar, with 450 children of both sexes.

(3) The Lawrence Asylum, Murree, with 90 boys and 70 girls.

(4) Bishop Cotton's School, Simla, with 100 boys.

(5) Auckland House School, Simla, with 130 girls.

(6) The Mayo Orphanage and School for girls, Simla, with 60 girls.

(7) Christ Church Schools at Simla, with 45 boys and 50 girls.

(8) St. Denys' School for girls at Murree, with 45 girls.

(9) The Cathedral Orphanage at Lahore, with 45 boys and 40 girls.

(10) Cathedral High School for boys (58) and for girls (62) at Lahore.

(11) *Amritsar Mission Schools.*—College and High School for 400 boys, Alexandra High School for 50 girls, Middle and Normal School for 50 girls.

Clarkabad.—Industrial Schools for boys and girls.

Batála.—The Baring High School, A. L. O. E. High School; and Mission Schools at Kángra, Dharmsála, Kashmir, Pesháwar, Bannu, Dera Ismail Khan, Mooltan, Baháwalpur, Hyderabad, Karáchi, Kotgarh, Tarn Táran, Majítha, Nárowál, Fathegarh and Jandiála.

Besides these, there are smaller schools at Delhi, Ambala, Mooltan, Ráwalpindi and other stations.

Schools and Religious Institutions of the Roman Catholic Diocese of Lahore.

709. The following are the principal Roman Catholic Educational Institutions, *viz.*:—

(1) St. Anthony's High School for European boys at Lahore, with 100 boys.

(2) St. Francis' Orphanage for native boys at Lahore, with 140 orphan boys.

(3) The Convent School of the Congregation of Jesus and Mary for European girls, with 112 girls at Lahore.

(4) St. Joseph's Orphanage for native girls, with 135 orphan girls at Lahore.

(5) A Primary and Middle School at Dalwál, Jhelum District, with 200 native boys.

(6) St. Mary's Convent School for boys and girls at Mooltan, with 70 pupils.

(7) The Convent School at Siálkot, with 42 girls.

(8) The Convent of the Sacred Heart at Dalhousie for boys and girls, with 34 pupils.

(9) Three Convents of Nuns of the Order of Jesus and Mary at Siálkot, Lahore and Murree, and one Convent at Tara Hall, Simla, of the Nuns of the Blessed Virgin Mary.

Schools, &c., in Agra diocese.

710. The following schools in Simla are under the control of the Archbishop of Agra :—

(*a*) St. Aloysius' Boarding School for young ladies, with 62 pupils.

(*b*) St. Francis' Orphanage for European girls, with 108 orphans.

(*c*) St. Joseph's Day School for girls, with 50 pupils.

(*d*) St. Francis' Day School for boys, with 35 scholars.

(*e*) Loretto Convent at Tara Hall, Simla—Boarding School for young ladies, with 50 pupils, conducted by the Nuns of the Institute of the Blessed Virgin Mary.

Stationery.

Consumption in Punjab Civil Offices.

711. The Punjab Administration depends on the Stationery Department, Calcutta, for its stationery requirements. The value of issues in 1901-02 to the officers in the Punjab aggregated Rs. 1,57,288, *viz.*, cost of printing paper Rs. 85,437, of office stationery Rs. 68,515, and of padlocks Rs. 3,336, against Rs. 31,713, Rs. 61,948 and Rs. 238 respectively in the previous year, aggregating Rs. 93,899. The increase in the first item is attributed partly to the use of a higher class of paper, that in office stationery to the extended use of type-writers, and in padlocks to a heavy indent by the Financial Commissioner, Punjab, for the use of treasuries.

General Miscellaneous.

GOVERNMENT PRESS.

Income and Expenditure.

712. The following statement compares the income and expenditure with the value of work turned out during the years 1900-01 and 1901-02 :—

INCOME.		EXPENDITURE.		VALUE OF WORK.	
1900-01.	1901-02.	1900-01.	1901-02.	1900-01.	1901-02.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
6,602	6,899	1,36,875	1,40,985	1,62,233	1,58,631

Growth of Income.

713. Taking the several sub-heads together, the income of the Press during the year under report exceeded that of the preceding year by Rs. 297. In this connection it may be mentioned that there has been a steady advance in the income of the Press during the past four years, as will be seen from the figures given below :—

	Rs.
1898-99	3,496
1899-1900	3,784
1900-01	6,602
1901-02	6,899

Expenditure.

714. The total expenditure amounted to Rs. 1,40,985, or an increase of Rs. 4,110 over the figures of the preceding year. This increase, which falls chiefly under the head "Contingencies and payments to Government Contractors," is due (*a*) to payments made to the Government Contractors for work done by them in connection with the Famine for which no provision had been

made in the budget, but which neverthless had to be met out of the Press grant; (*b*) to Railway freight paid on consignments of stationery received from Lucknow and Calcutta; and (*c*) to purchase of a printing and a stabbing machine from an English firm at a cost of Rs. 3,000 (about).

Value of Work.

715. The value of work turned out during the year was Rs. 1,58,631 against Rs. 1,62,233 in the previous year, or a decrease of Rs. 3,602 over the figures of the preceding year. This decrease is due chiefly to the reduction of work caused by the separation of the Frontier, which also accounts for the falling off in the net profit from Rs. 25,358 in 1900-01 to Rs. 17,646 in the year under report.

Amount of Work.

716. The total number of pages set up in all founts of type during the year under report amounted to 62,255 as against 65,194 in the preceding year, exclusive of work done by Government Contractors and paid for out of the Press grant. The cost per *Pica* page was Re. 1-7-9 as against Re. 1-6-0 in the preceding year,—the increase being due partly to the purchase of two new machines and partly to the extra freight which had to be paid on account of paper supplied by the Superintendent of Stationery.

Contract Work.

717. The cost of work done by the Contractors for Government Printing for Departments and Offices during 1900-01 and 1901-02 was Rs. 88,454 and Rs. 73,953 respectively.

Machinery.

718. The machine and hand presses are in good working order. The new printing machine received from England during the year has proved very useful and handy in turning out with great expedition lakhs of forms and certificates in connection with plague.

Punjab Government Press, Lahore—18-12-02—506.

PUNJAB ADMINISTRATION REPORT, 1902-1903.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1902-1903.

ROYAL LIBRARY OF THE BOMBAY BRANCH OF

LAHORE:
PRINTED AT THE PUNJAB GOVERNMENT PRESS,
MCMIV.

PRINTED BY LALA SITA RAM,
SUPERINTENDENT, PUNJAB GOVERNMENT PRESS, LAHORE.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1902-1903.

PART I.

GENERAL SUMMARY.

[The "year" throughout this report is not invariably the financial year ending 31st March 1903. At the heading of each chapter a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in Chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March, in Chapter II it is the revenue year ending 30th September 1902, and in Chapters III and VI it is the calendar year ending 31st December 1902.

Last year's report was a decennial report and as such contained many chapters of permanent interest to which reference may be necessary in order to understand the working of the Administration; but under the orders of the Government of India these chapters are not repeated each year. For facility of reference, however, a short summary of the headings of the decennial chapters is inserted.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.]

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir Charles Rivaz, K.C.S.I., held the office of Lieutenant-Governor throughout the year.

Changes in the Administration.

2. There have been no noteworthy changes in the Administration during the year.

NATIVE STATES.

Relations with Tributary States.

3. The relations with the various Native States under the control of the Punjab Government are noticed at length in Chapter I of the Report under the head "Tributary States." During the minority of the Mahárája Patiála continues

under the administration of the Council of Regency. Mr. T. H. S. Biddulph, whose services have been lent as Accountant-General, and Major F. Popham Young, C.I.E., who is in charge of the settlement, continued to do good work for the Council. The fiscal arrangements of Patiála are now on a regular footing. The Nawáb of Baháwalpur acted as Superintendent of the State for five months while Colonel L. J. H. Grey, C.S.I., the Superintendent, was on leave. A fixed boundary line has now been laid down between Baháwalpur and the neighbouring Punjab Districts in place of the shifting river boundary formerly followed. The Heir-Apparent of Máler Kotla on January 1st, 1903, was entrusted with the duties of Superintendent of the State formerly exercised by the Nawáb of Loháru, but the latter is still retained as adviser. Certain selected Chiefs attended the Delhi Darbár, and during it the Kanwar Sáhib of Patiála had the honour of receiving the K.C.S.I., and the Rája of Nábha the G.C.I.E., and the latter was appointed Honorary Colonel of the 14th (Ferozepore) Sikhs. Plague was still prevalent in Patiála, Nábha and Jínd and outbreaks of the disease occurred in Kalsia and Dujána. Rája Bije Sen of Mandi died in December 1902 and has been succeeded by his illegitimate son, Rája Bhowáni Sen, who was selected during his lifetime as his successor. Rája Bije Sen of Keonthal received full powers on June 26th, 1902. Nothing eventful happened on that part of the North-West Frontier which is under the control of the Punjab Government.

Condition of the People.

Scarcity in Hissar.

4. There was scarcity in Hissar, where the harvests were bad and about two thousand people at the beginning of the year were in receipt of gratuitous relief, but chiefly owing to the stability of the prices of food-stuffs nothing like famine conditions were ever reached, and direct relief was stopped in November. Much indirect relief was given by remission of previously suspended revenue and by suspension of a large portion of the revenue for the year.

Administration of the Land.

Proportion of land revenue subject to fluctuation.

5. The proportion of land revenue classed as fluctuating is steadily increasing. The fluctuating system had in the previous year as the result of the settlement recently concluded been introduced into the Mooltan District, and similarly in the year under report it was extended to Muzaffargarh and to the Fázilka Tahsíl of Ferozepore as the result of re-assessment operations, and at present nearly one-seventh of the total land revenue is classed as fluctuating. There is no doubt that the people derive great advantages from a carefully devised fluctuating system of assessment in tracts where violent fluctuations in harvests are liable to occur, and the experience of its working in a bad year appears to have brought this home to the people of Mooltan.

Collections of revenue.

6. There was an increase in the fixed land revenue demand mainly due to the completion of the revision of assessment in the Jhelum District. The percentage collected, 86·6, was smaller than in the previous year, the reason being that the failure of crops in the Delhi Division and more especially in the Hissar District rendered it necessary to suspend large sums. In addition to this, arrears of previously suspended revenue in the famine

affected tracts of the Punjab were remitted up to the extent of 39 lakhs under the orders of the Government of India. This relief came appropriately in the Coronation year.

Land Alienation Act.

7. The object of the Land Alienation Act, as was explained in last year's report, is to stop by direct legislative prohibition the alienation of land by peasants to the money-lending classes. Its importance cannot be overestimated, for not only is the political and economic future of the Punjab (which is mainly a province of peasant proprietors) likely to be largely affected by its successful working, but it is a novel experiment in legislation which if successful in the Punjab may be adopted in some form or another in other parts of India. Of course it cannot be expected that in such a short time any very definite conclusions about the effects of the Act could be formed. The working of the Act is not yet perfectly understood by all the Revenue officials or by the people at large, and the normal effect of the Act in so far as transfers of land are concerned cannot be gauged with accuracy for some years owing to the abnormal causes at work both before and after the Act came into force. But with all these reservations it is clear that the Act has brought about a decrease in transfers by mortgage and sale, and this, which was the main object of the Bill, has been accomplished without any great depreciation of the value of land or contraction of credit and without throwing much extra work on the Revenue staff; also it is satisfactory to be able to record that so far few devices appear to have been contrived for evading the provisions of the Act. The law of pre-emption which as at present framed is at conflict with some of its provisions is now under amendment. Thus most of the hopes entertained by the promoters of the Act seem in a fair way to being realised, while most of the fears of the critics of the Act seem to have been prophecies which have not as yet been fulfilled.

Surveys.

8. A detachment of the Government of India Survey was at work in various districts, and did good work; but the Department has not kept pace with the settlement operations in the Province. The work of laying down a fixed boundary between Baháwalpur and the adjoining districts of the Punjab has been referred to in paragraph 3. Similar progress has been made elsewhere in laying down fixed boundaries under the Riverain Boundaries Act.

Settlements now in progress.

9. The two settlements in progress in Muzaffargarh and in the two adjacent tahsíls of Fázilka and Sirsa were drawing near their close towards the end of the year under report. Shortly after the end of the year orders were passed on the assessment of the portion of the Miánwáli District which is being settled along with the Dera Ismail Khan District. The settlement of the Attock Tahsíl had been commenced in the previous year when it was attached to the Hazára District; it is now part of the Ráwalpindi District, of which the remaining tahsíls were brought under settlement in the year under report. In the Ráwalpindi District and in the Háfizabad and Khangah Dográn Tahsíls of the Gujránwála District, which were also under settlement during the year, the maps now in use were prepared at settlements completed within the last 20 years and have been found so accurate that instead of re-measuring villages completely it is only necessary to revise the old maps. The year was devoted to this work in these settlements. The remaining settlement in progress was that of the old cultivation of the Jhang District, which is being completely re-measured.

Government Colonies.

10. The formation of colonies on Government Canals was described in Part I of last year's (decennial) Administration Report. The land on which they are founded was originally waste and belonged to Government. Irrigation turned these wastes into valuable property and the land was parcelled out among selected colonists. Government has, however, retained the ownership of the greater part of the land in its own hands and has let it out on leases the conditions of which curtail alienation as effectually as the provisions of the Land Alienation Act. Having a free hand from the start and being in the position of a landlord with exceptional powers, the Government has been able to pay special attention to the organisation, sanitation, and general welfare of these new communities. The unit of holding is a square of about 28 acres, but the area granted and the conditions attached to the grant differ for the various classes of colonists. These include peasants, yeomen (*i. e.*, peasants of a superior class with a little capital), capitalists, military pensioners, camel service grantees and peasant horse-breeders.

Chenab Colony.

11. Most of the land in the Chenab Canal Colony has been allotted, the gross allotted area being over 1,700,000 acres, and the great majority of colonists have now built their houses. Good progress was made during the year in sinking wells at village sites which it is expected will soon each be provided with one. The colonists live in healthy conditions and there was little sickness during the year. The sanitation of the towns which have been formed is very carefully supervised and drainage schemes have been started in most of them. The need of the colony is communications, but several metalled roads were under construction during the year, and considerable sums have since been devoted to the same purpose, and it is hoped that the railway communications will also shortly be supplemented and improved.

Jhelum Colony.

12. The Jhelum Canal Colony is smaller than the one on the Chenab Canal. The work of colonisation was begun during the year under report, and was much facilitated by the experience gained in the older colony. In accordance with the recommendations of the Horse-Breeding Commission, a large proportion of the area of the colony, nearly three-quarters, will be allotted to colonists on special horse-breeding conditions. One of the most important features of these special grants is that in them succession according to the rule of primogeniture is made compulsory. A consolidated acreage rate takes the place of the varying dues for land revenue, rent and cesses collected on the Chenab Canal. The site of the head-quarters station of the colony, Sargodha, was fixed and the construction of buildings there was commenced.

Court of Wards.

13. Estates which from their size or the political importance of their owners it is important to maintain in a sound financial position are during the minority or incapacity of the owner taken under the management of the Court of Wards. A Bill to amend and consolidate the law on the subject was introduced into the Punjab Legislative Council during the year. There were 43 such estates under the Court of Wards in 1902 and their receipts and expenditure during the year amounted to 17 and 19 lakhs respectively.

The management of the Goler and Sher Shah estates which have been impoverished by the extravagance of the proprietors presents difficulties; the others have yielded satisfactory results.

LEGISLATION.

Military Transport Act.

14. The Bills passed by the Provincial Council during the year were the Delhi Darbár Police Act, which was a purely temporary measure to provide for the needs of the Darbár, and the Punjab Military Transport Animals Act. The latter Act provides for the periodical enumeration and registration of animals in the Punjab fit or ordinarily used for the purposes of military transport, and for the compulsory acquisition of such animals in time of war. It is hoped that the effect of the new Act will be to regularize and distribute the burden which in former frontier campaigns was often unequally and unfairly spread over the districts of the Province.

POLICE.

State of crime.

15. There was more crime in 1902 than in 1901 but less than in 1900. The year 1900 was a year of high prices, and therefore the figures for crime were high. The figures for 1901 showed a decrease in crime generally, and particularly in murders, dakaitis, robberies and burglaries, and this decrease was accounted for by good agricultural conditions as well as by the effects of the special measures undertaken in 1900 for the repression of dakaiti. A number of circumstances in the year now under review were calculated to result in an increase of crime. The agricultural conditions of the preceding autumn and of the earlier part of the year were unfavourable, while during the first half of the year a large part of the Province was afflicted with severe and widespread plague. The unprotected state of places evacuated on account of the epidemic afforded opportunities for thefts and burglaries, while the high death-rate in some districts unsettled the minds of the people and gave rise to a recklessness which resulted in increased crime. Moreover, the presence of plague increased the ordinary difficulties with which the Police have to contend in the investigation of offences. Agricultural prospects, however, improved in the latter part of the year, and plague, after its seasonal decline in the hot weather, did not again become severe before the end of the year. In the latter part of the year a large contingent of police and village watchmen, whose places were taken by temporary substitutes, was withdrawn from their ordinary duties for about two months for duty at the Delhi Darbár, and some increase of crime might have been expected to follow this as well as the assemblage at Delhi of the multitude which was drawn thither by the Darbár. The employment, however, which was provided for great numbers of people in connexion with the Darbár tended to decrease crime in the eastern districts of the Punjab, and the crime committed during the Darbár itself was inconsiderable, and for this great credit is due to the Punjab Police and the local officers responsible for the Darbár arrangements. Under the circumstances it cannot be said that the rise of crime in 1902 is due to any defects in the Police working, and it is satisfactory to see that there is a decrease in the number of murders.

CRIMINAL JUSTICE.

Percentages of convictions, and of successful appeals.

16. The percentage of convictions obtained in criminal trials fell as low as 27 in the year under report, and on the other hand the number of appeals which met with success rose to 37 in the 100. Attention was drawn in the Lieutenant-Governor's Review of the Report on the administration of Criminal Justice to the facts that Magistrates are often much too lenient to habitual criminals, and that the principle of progressive punishment, which is the only effective way of dealing with such offenders, is not acted upon by some Courts.

PRISONS.

Prisons.

17. Although the number of convicts admitted during the year was greater than last year, the average population of the jails was less, mainly owing to the large number of convicts sentenced to short terms of imprisonment. Owing to various unavoidable causes, the amount earned by the prisoners was less than last year. The total expenditure was lower, but the expenditure *per* prisoner was slightly higher than in the previous year. Although plague was prevalent in many districts of the Province, there were only 3 deaths from plague among the convicts, and, although the death-rate of the free population increased during the year, that of the jail population was less than last year. A special ward for consumptives has been built in the Lahore Central Jail, and similar projects are under consideration for other jails. It is hoped that by means of isolation the increase of this disease which has of late years been noticed among the jail population will be checked.

CIVIL JUSTICE.

Decrease in litigation.

18. The decrease in the number of original suits shown in the returns for 1902 is due partly to the effect of the Land Alienation Act in reducing pre-emption and mortgage suits and partly to the scarcity in the Eastern Punjab, which discouraged litigation there. Suits of petty value continued to form a very large proportion of the whole. The amount realized by execution of decrees, 22 per cent. of the value of the money decrees in execution, was, as usual, small. The Hon'ble Judges of the Chief Court are taking steps to improve the working of the Courts in this respect, but there can be no doubt that the statistics do not quite do justice to the results obtained ; many decrees are settled out of Court, and the course of litigation indicates no dissatisfaction with the working of the Courts. In order to expedite the disposal of suits it was arranged during the year that in certain districts in which the amount of civil case work is large, the whole time of certain officers should be devoted to the trial of such cases.

Chief Court.

19. The Chief Court have extended the civil appellate jurisdiction of single benches, and it is hoped that this will expedite the disposal of work in that Court and reduce its large file of pendi ng cases.

REGISTRATION.

Effect of Land Alienation Act.

20. The total number of documents registered continued to decline, owing to the Land Alienation Act, but during the last half of the year some signs of reviving business were noticeable.

LOCAL SELF-GOVERNMENT.

Local Boards and Municipalities.

21. There is nothing particular to notice about the working of the District Boards or Municipalities during the year. They have done on the whole well. Plague was not only the cause of decreased receipts in octroi, but it entailed increased expenditure, and expenditure on other projects has had to be necessarily curtailed. Indeed, in some of the districts which were afflicted by plague or scarcity not only has it been found impossible to start any new public works, but difficulty has been found to provide money for the proper upkeep of existing institutions.

AGRICULTURE, WEATHER AND CROPS.

Harvests of the year.

22. In June and July 1902 sufficient rain fell to enable the autumn crop to be sown, and in September and October there was sufficient to mature the autumn crops in most districts and to enable the spring harvest of 1903 to be sown. There was, however, a break in the rains in August which caused large areas of unirrigated crops to dry up in the Kharíf in parts of the Province, and the winter rains were long delayed with the result that there was a similar failure of crops in the Rabi. But, notwithstanding this, the outturn of wheat, which is the most important crop in the Province, was remarkably good, and taking the Province as a whole the two harvests together were only a little below normal. The area harvested considerably exceeded that of the previous year, which was a bad one. As was to be expected in a normal year, prices remained on the whole very steady.

Agricultural improvement.

23. The condition of cattle generally speaking has been good. Fodder, except in a few districts, was sufficient. Inoculation against cattle diseases, though still a new experiment in the eyes of the people, is progressing satisfactorily. Horse and mule breeding has been taken over by the Army Remount Department, who are concentrating their operations in the 10 most important horse-breeding districts and in the Chenab Colony, and the Provincial Veterinary Department will now concern itself mainly with cattle. Several cattle fairs had to be closed owing to the prevalence of plague.

FORESTS.

Forest management.

24. The net surplus income of the Department for the year 1902-03, excluding an extraordinary payment of Rs. 1,61,583 to the Chamba State on account of its share of the profits on the working of its forests for the previous three years, was Rs. 6,22,261, which exceeds last year's income by nearly Rs. 90,000. The increase is mainly due to larger sales of fuel. The value of the produce removed from the forests by right-holders and free grantees was Rs. 7,88,960, which is nearly half as much as the gross income secured for Government. Fifty-eight square miles, mostly in Shahpur, were surrendered by the Forest Department for cultivation.

TRADE AND MANUFACTURES.

Total imports and exports.

25. The total value of the trade of the Province during the year was £18,300,000 sterling, the imports exceeding exports by about £2,400,000 sterling. The value of imports is nearly the same as last year. The value

of the exports is about normal, last year's export of grain having been exceptionally high owing to the extraordinarily good spring harvest of 1901. The values of the principal articles of export were—grain and pulse, 441 lakhs; raw cotton, 192 lakhs; hides and skins, 45 lakhs; oil-seeds, 38 lakhs. The chief items in the import list were—

European twist and yarn	14 lakhs.
Indian twist and yarn	20 „
European cotton piece-goods	234 „
Indian cotton piece-goods	155 „
European woollen piece-goods	11 „
Indian woollen piece-goods	11 „
Other sorts of manufactured wool	80 „
Sugar	185 „
Metals	155 „
Jute	47 „

Trans-Frontier trade.

26. Kashmir monopolises over 90 per cent. of trans-frontier imports and exports, but both imports and exports have fallen below last year's figures, owing chiefly to the prevalence of plague in Ludhiána, a large trading centre in the Punjab.

General.

27. Karáchi still attracts most of the Punjab trade. There are no noticeable fluctuations in the number of joint stock companies, but the number of ginning factories has increased slightly.

PUBLIC WORKS.

New works.

28. The year was one of activity in the Public Works Department which had a large allotment for disposal in the Province and was also charged with the construction of the Delhi Darbár works and other Imperial projects. The chief works during the year were the construction of the Government of India Civil Secretariat at Simla, which will probably be finished in the summer of 1904; the improvement of the Kángra Valley cart road; the completion of the Ophthalmic Ward to the Mayo Hospital, Lahore; and the conversion of the old Lunatic Asylum at Delhi into a Reformatory. Progress was made with the new civil station of Miánwáli, and also with the buildings at Sargodha, the head-quarters of the new Jhelum Canal Colony. Restoration of old monuments was undertaken at Delhi and at Shahdara near Lahore, and a new treasury was built in the Fort at Lahore in order that a mosque formerly used for the purpose might be vacated and kept as an archæological remain. The drainage system of Lyallpur was practically completed.

IRRIGATION.

Income from canals.

29. The sum invested in Punjab Canals is just under 7 millions sterling, on which interest at 11·3 per cent. was earned as the net result of the year's working after deducting expenditure from income. The area irrigated was over $5\frac{1}{2}$ million acres. The Chenab Canal, the largest of all, which has cost £1,830,621, gave a return of 21·13 on this capital. All the canals earned over 6 per cent. with the exception of the Sidhnai, which suffered from

a late and deficient rainfall, and the Jhelum, which is not yet in full working order. Some of the able-bodied population in Hissar during the period of scarcity migrated temporarily to the Chenab Canal Colony in search of work. The opportunities for labour on the canals, combined with the steadying effect of their large grain-producing area on the prices of food-stuffs, helped to mitigate considerably the scarcity in that district.

Revenue and Finance.

Total revenue and expenditure of Punjab.

30. The revenue raised in the Punjab during the year amounted to 630 lakhs of rupees, or a little under 4¼ million sterling. This includes revenue of the Canal and Salt Departments, but not the receipts of the Railways, Telegraph and Post Office (Imperial) Departments or funds raised for Municipal purposes. Expenditure, omitting that of the three latter Departments and Military expenditure, amounted to 340 lakhs, or about 2¼ million sterling. The contribution of the Province therefore to Imperial needs, which include defence, home charges and interest on loans, was a little under 2 millions sterling.

Influences affecting the finances of the year.

31. Nearly 40 lakhs of previously suspended famine arrears were written off under orders of the Government of India, a step which was made possible by the surplus found to exist in the general revenues of the country at the close of the preceding financial year. In addition to this, large suspensions of land revenue for the year under report were rendered necessary in the Delhi Division by bad seasons. This caused a decrease in receipts under Land Revenue and Local Rates, while plague charges increased the expenditure by nearly 2 lakhs. On the other hand, there was an increase in receipts from irrigation owing to a greater demand for canal water and a rise in the fixed land revenue demand for the reason explained in paragraph 6.

Details of revenue.

32. The revenue of the Province is made up of the following items :—

	Lakhs of rupees.
Taxes on the land (Land Revenue, Local Rates and Cesses)	2,71
Other Civil Departments	1,33
Irrigation (Direct Receipts)	1,59
Salt	67
Total ...	6,30

Of the 271 lakhs raised from the land, 230 lakhs are classed as Land Revenue and 40 lakhs Local Rates, of which latter the principal are the rates raised for local expenditure and administered by District Boards and the Patwári Cess.

Civil Revenue other than Land Revenue.

33. Of the 133 lakhs referred to above as the revenue of other Civil Departments the principal items are—

Stamps	39 lakhs.
Excise and Opium	27 lakhs.
Forests	16 lakhs.
Income Tax	14 lakhs.

The income from Court-fee Stamps and Judicial Fines (27¾ lakhs) does not, as in some other Provinces, exceed the cost of Judicial establishments. In 1902 the charges for the latter amounted to 33 lakhs.

Excise Income.

34. The income of the Excise Department, which was as in the previous year derived from liquors, opium and drugs in the proportion of six-ninths, two-ninths and one-ninth respectively, shows an increase of more than a lakh over last year's receipts. The improvement is shown under all heads. The supply of white rum manufactured in India, which is the main intoxicating drink of the natives of this Province, is now entirely in the hands of private distillers. Indian spirit of this kind pays a still-head duty of Rs. 4 per proof gallon. License fees yield about two-thirds of the opium revenue and the remainder is contributed by an acreage duty on opium grown within the Province by duty collected at Ajmer on Málwa opium imported into the Punjab and by sale proceeds of Excise opium; there is also some income from duty on opium exported from Hill States. Compared with other Provinces, opium is inadequately taxed in the Punjab, and with a view to correct this inequality a scheme has recently been submitted to the Government of India, which aims at requiring all local produce to be warehoused with the object of its being excised with a quantitative duty before it is passed out to licensed vend premises. Receipts from the import duty on charas show a considerable rise. The Government of India has now sanctioned the raising of the duty with effect from April 1, 1904, from Rs. 2 a seer to Rs. 6, which corresponds to the duty levied in the United Provinces. There was also a rise in the receipts from bhang, which pays an acreage duty of R s. 4 per acre and a transport duty of Rs. 4 per maund. Opium-smoking, the form of consumption of the drug which is most deleterious, is not practised in this Province, and no madak and chandu shops are licensed.

Income Tax.

35. Apart from land revenue, which only affects those holding land, the income tax is the only form of direct taxation which affects the trading classes. One-seventh of the total proceeds of this tax is realised by deduction from the salary bills of officials of Government and of local authorities. The remaining six-sevenths is mostly paid by traders. About one-third of the unofficial assessees, of whom the majority have incomes under Rs. 1,000 a year, appeal regularly against the assessment. It is probable that next year Act XI of 1903 (which released all incomes under Rs. 1,000 from the tax) will bring about a decrease in the number of objections as well as a reduction in the total realizations.

Salt Revenue.

36. The Salt Department is not under Provincial control, but its operations within the Province are noticed in Chapter V of Part II. They were affected towards the end of the year by the reduction of duty which was then announced, but not in such a manner as to afford any index to the result of the reduction.

Provincial Revenues.

37. The position of the Provincial exchequer is explained on page 85 of Part II. For many years the influence both on revenue and expenditure of famine and plague, and the need for special outlay on the new colonies to meet various requirements which may be regarded as extraordinary, have prevented the accrual of surpluses available for increased grants for ordinary public works throughout the Province. It is partly owing to this and partly because the whole system of provincial settlements is undergoing revision at the hands of the Government of India that the provincial settlement which expired at the end of March 1902 has been continued to the end of March 1905.

Local Funds and Municipal Revenues.

38. The finances of many District Boards suffered from a decreased local rate owing to famine suspensions and remissions and from the effects of plague, which not only reduced the receipts from horse fairs and school fees, but increased the expenditure. Analysing the expenditure of the District Boards we find that 23 per cent. was spent on Education and 10 per cent. under the head "Medical" The share of total expenditure which after meeting the demands of other Departments District Boards can afford to devote to Public Works is less than in any other of the large Provinces. This year only 28 per cent. of the whole expenditure was devoted to Public Works in the Punjab, as compared with 48 per cent., the figure worked out for the rest of India on ten years' figures in last year's report. The finances of some of the Municipalities too were adversely affected by plague, which caused a decrease in octroi and an increase in expenditure. Over a half of the Municipal expenditure was incurred on Public Health and Convenience, including drainage and sanitation, an eighth on General Administration, including the cost of collecting taxes, one-eighth on Public Safety, *i.e.*, Police, and one-ninth on Education.

VITAL STATISTICS.

Birth-rates.

39. The average birth-rate in 1902 was 43·8. This rate is 8·4 per 1,000 higher than in 1901 and 3·8 higher than the average for the previous five years. As regards the birth-rates registered in the different Provinces of India in 1902, the Punjab stands third on the list.

Death-rates.

40. The death-rate was 44·1, which was the highest Provincial rate recorded in India for the year. The prevalence of plague in some districts and of fever in others was responsible for this unusually high mortality. The excessive figure of 103·9 *per mille* was recorded in the district of Ludhiána.

Fever.

41. The deaths recorded as caused by fever are more than half of the total number of deaths. Taking the Province as a whole, the fever mortality was fairly normal when compared with the previous five years, but in 5 out of the 7 districts of the Delhi Division the mortality was distinctly high. In Hissar and in Delhi there were outbreaks of cerebro-spinal fever.

Plague.

42. The Punjab has since 1897 been suffering from bubonic plague. It has been noticed that the disease usually reaches its climax in March and dies down in the hot weather. The epidemic, which reached its climax in March 1902, was very severe and widespread, both cases and deaths recorded

being more than 23 times those of all the four previous outbreaks put together. Fifteen British Districts and 8 Native States were infected, and the severity of the attack can be judged from the fact that in Ludhiána, where the plague was most widespread, 7 per cent. of the population died from plague alone. The severe epidemic of the following year which commenced in October 1902 and reached its height in March 1903 will be discussed in next year's report. The Punjab plague policy has now undergone a change. The special measures taken for the suppression of plague have unfortunately failed to materially stop its progress, and although efforts will continue to be made to induce people to adopt proper measures to fight the disease, the element of compulsion which proved so unpopular in the past has been gradually reduced to a minimum, and it now remains to be seen whether the people will adopt of their own free will those measures of inoculation, desiccation and evacuation which experience has proved to be beneficial in combating this disease.

MEDICAL RELIEF.

Hospitals and Dispensaries.

43. The total number of patients treated in hospitals and dispensaries was 14·8 per cent. of the population of the Province. Nine-tenths of the expenditure is contributed by District Boards and Municipal Committees. Voluntary subscriptions by Natives of India have never been large, and have been steadily decreasing each year. Considerable improvements have been made to the Lahore Medical College.

Pasteur Institute.

44. The number of patients treated at the Pasteur Institute at Kasauli was nearly double that of last year. The number of Europeans treated was 215 and of Natives 328. This is a very satisfactory result for the second year's working, and shows that the Institute is much appreciated.

Vaccination.

45. A scare that vaccination was connected with anti-plague inoculation caused a decrease in vaccination in the Kángra District and in the Simla Hill States. But in the plains districts vaccination made satisfactory progress.

SANITATION.

Sanitary projects.

46. Under the advice of the Sanitary Engineer, considerable improvements were effected in the water-supply and drainage of several large towns of the Province, including Simla, Lahore, Ambala, Delhi and Ráwalpindi.

EDUCATION.

General progress.

47. Arts Colleges and Secondary Schools have decreased in number and their attendance has also diminished ; this is due to the non-recognition of many inefficient institutions. Primary and Special Schools have increased both in their number and in respect of the pupils on their rolls. The increase in pupils attending Special Schools is significant of the desire for something more than a literary education. Practical education has been greatly encouraged by the intro-

duction of Agriculture, Drawing, Advanced Science and Clerical and Commercial Courses in the Secondary Departments; by the addition of Map-Drawing, Land Records, Mental Arithmetic and the Principles of Elementary Agriculture and Hygiene to the Primary Course; and by the facilities given to Aided Elementary and Indigenous Schools in earning additional grants for industrial subjects. Expenditure has increased. Teachers' Associations have done much in improving the methods of instruction. Examination results have been satisfactory. Greater attention has been paid to female education, and the number of girls receiving instruction has increased. Education sustained a serious loss by the death of Dr. Stratton, late Principal of the Oriental College, Lahore, and Registrar of the Punjab University.

Professional and Technical Education.

48. Professional education is represented by the Law, Medical and Veterinary Colleges at Lahore; while the Mayo School of Arts may be regarded as a higher technical institute. There has been an increase in the number of students on the rolls of the Medical and Veterinary Colleges. The woodwork designed and executed by the Mayo School of Art was much admired at the Delhi Darbár.

Literature and the Press.

Vernacular books.

49. There is nothing particular to notice under this head except a slight rise in the proportion of books of real worth.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1. The following subjects were treated in last year's decennial report and will not be treated again till 1911-12:— Subjects treated in last year's decennial report.

(*a*) Physical Features of the Country, Area and Climate.

(*b*) Historical Summary of the Punjab.

(*c*) Form of Administration.

(*d*) Land Tenures.

(*e*) System of Survey and Settlements. (This is more fully described in the Punjab Settlement Manual.)

(*f*) Civil Divisions of British territory.

(*g*) Details of last Census—Tribes and Language. (The final results of Dr. Grierson's linguistic survey have not yet been published.)

Changes in the Administration.

2. With the exception of the transfer of Narinji village to the Dera Ismail Khan District of the North-West Frontier Province with effect from 6th August 1902 there have been no changes in the area of the Punjab during the year under report. Transfer of a village to North-West Frontier Province.

3. Including the figures for the above-mentioned village (which cannot be deducted as they are not available at present) the area, population and land revenue of the districts in the Punjab are— Area, population and land revenue of the Punjab.

Area, square miles.	*Population.*	*Land Revenue Collections.* 1901-02. Rs.
97,272	20,306,252	*2,30,53,119

Tributary States.

4. Excluding Baháwalpur, for which there was no special Political Officer till after the end of the year under report, and Chamba, which is in the Political charge of the Commissioner of Lahore, the Native States in the Punjab are arranged for the purposes of supervision into four groups, as follows:— I, the Phulkián States, comprising the States of Patiála, Jínd and Nábha, for which a separate Political Agent was appointed on the 16th January 1901; II, the States of Kapurthala, Mandi, Máler Kotla, Farídkot and Suket in the Political charge of the Commissioner of Jullundur; III, the States of Sirmúr, Kalsia, Pataudi, Loháru and Dujána in the Political charge of the Commissioner of Delhi; and IV, the States of Biláspur, Bashahr, Nálágarh, Keonthal and the numerous other small States in the Simla Hills which are in the charge of the Superintendent of Hill States, Simla. Political supervision.

*NOTE.—These figures are those reported by the Accountant-General for the financial year.

I.—Phulkian States.

PATIALA.

Area, 5,412 square miles; population, 1,586,030; gross revenue, Rs. 60,91,052; estimated Military Forces, including Police, 8,322; race of Chief, Sidhu Jat.

General.

5. The Chief, Mahárája Bhupendar Singh, was 11 years of age in October 1902, and the affairs of the State have, throughout the year, continued to be administered by the Council of Regency. His Highness attended the Coronation Darbár at Delhi, where the Kanwar Sáhib, Ranbír Singh, of Patiála was invested with the K. C. S. I.

Administrative.

6. There has been no change in the constitution of the Council of Regency during the year. The members of Council have one and all worked extremely hard, and with a praiseworthy regard for the best interests and traditions of the State. Despite the difficulties of their position they have shown commendable firmness, and have given their Financial Adviser loyal support in all his proposals.

Finance.

7. The new fiscal system has taken practical shape, and the various departments have, for the first time for many years, been obliged to conduct their operations in conformity with it. The enormous outstanding claims have been examined and, with but one exception, adjusted, and large arrears due to the State, but for many years neglected, have been collected. The Patiála-Dholpur case is still unsettled, but the representatives of the two States will probably submit their joint report this year. The States have withdrawn their objection to Mr. S. J. Tellery being declared an insolvent in the case now pending before the High Court of Bombay.

Police.

8. The Police Department has been reorganized and put on a proper footing, and the checks on crime have, at the same time, been made more effective.

Army.

9. Large reductions have been made in the local troops, and the Imperial Service regiments are now properly equipped and fairly well paid. A contingent visited London on the occasion of His Majesty's Coronation and, in common with the contingents from the other Phulkián States, received the special commendation of the Secretary of State for India.

Railways.

10. Arrangements have been made for a special audit of the account of the Rájpura-Bhatinda Railway, with the working of which the Council have for some time been dissatisfied. It is too early to say what the results of this audit will be, but, in the meantime, for reasons not yet ascertained, the earnings of this branch have increased. An official application has also been made for a reduction in the percentage of gross receipts debitable to working expenses, which was pending with the Punjab Government at the close of the year.

Settlement.

11. Settlement operations in the State have been impeded to some extent by plague, and to a more serious extent by the hostility which has sprung up between landlords and their tenants in connection with the question of tenant rights, which the absence of previous records renders a most difficult one. At the close of the year, however, settlement operations were in progress in 11 out of 16 tahsíls, the total number of squares laid amounting to 126,613, and the total area mapped to 7,153,883 bighas. The final attestation of 429 estates has been completed, and one copy of the Settlement Record has been prepared for each of 294 estates. The expenditure incurred on settlement operations during the year amounted to Rs. 2,02,476.

Plague.

12. Plague was less virulent in the State during the past year, but the campaign against it in the hills was not so satisfactorily conducted as in the plains. Between July and November 1902 a comprehensive scheme of disinfection was carried through in Patiála City, and with excellent results.

NABHA.

Area, 928 square miles; population, 297,949; gross revenue, Rs. 12,45,612; Military Forces, including Police, 1,492; race of Chief, Sidhu Jat.

13. Rája Sir Híra Singh has during the year suffered from weakness and actual illness. In December, while recovering from a slight operation for fistula, he was so prostrated by a severe attack of bronchial asthma that at one time grave doubts were entertained of his ability to attend the Delhi Darbár. Special arrangements were, however, made for him at Delhi, and His Highness suffered comparatively little from the fatigue of the different ceremonies. On January 3rd he received the honour of investiture with the Grand Cross of the Indian Empire. He was also in addition to this Darbár honour appointed Honorary Colonel of the XIVth (Ferozepore) Sikhs. During the year the State has suffered a distinct loss by the death of Syad Wazír Ali, the Foreign Minister. General.

14. The friction between the local officials of the Báwal Nizámat and those of the neighbouring tracts in Alwar has continued unabated, but the Political Officers on either side are in consultation as to the measures necessary to prevent further disputes. Relations with other States.

15. Plague has displayed greater activity in the State this year than last. His Highness was much distressed by the sudden cessation of the inoculation campaign, and did his utmost to restore the people's confidence. As a last resort he caused himself, with his son and his Ahlkárs, to be inoculated in front of the people of Nábha City. There has been a marked absence of panic and increase in voluntary evacuation in the State, though the great mass of the people have maintained their objection to inoculation. Plague.

JIND.

Area, 1,256 square miles; population, 282,051; net revenue, Rs. 14,59,509; Military Forces, including Police, 1,303; race of Chief, Sidhu Jat.

16. The Chief, Rája-i-Rájgán Ranbír Singh, who is now 24 years of age, maintains his interest in the affairs of his State. On 29th June 1902 His Highness' remaining unmarried sister was married to Rája Monindar Partáb Singh of Hathras. General.

17. Important changes have taken place among the high officials of the State, the Rája having determined to replace the two Committees by whom all executive and judicial work was formerly conducted by a single Council, of which the three principal members, with the title of "Ahlkár Ala," dispose of all work, both executive and judicial. Administrative.

18. The Ludhiána-Dhúri-Jakhál Railway has begun to pay fairly good dividends, and it is anticipated that when the accounts of the past year are finally scrutinized the net profit to the State will be found to be over 4 per cent. on the capital. Railways.

19. As in Nábha, plague has been more active this year than last. There has been very little inoculation, but the people are beginning to realize the benefits of prompt evacuation. Plague.

II.—States in the Political Charge of the Commissioner of Jullundur.

KAPURTHALA.

Area, 652 square miles; population, 314,269; gross revenue, Rs. 11,00,000;* Military Forces, including Police, 1,534; race of Chief, Ahlúwália; tribute, Rs. 1,31,000.

20. The Chief, Rája-i-Rájgán Sir Jagatjít Singh, K.C.S.I., who is now 30 years of age, attended the Delhi Darbár on the invitation of His Excellency the Viceroy. The administration has been methodically and efficiently conducted by the Council appointed during the latter part of 1901. General and Administrative.

*Does not include the income derived by the Rája from his Oudh estates.

Plague.

21. In the end of October 1902 plague re-appeared, after a five months' cessation, in the Phagwára Tahsíl, to which for some time it was confined. Later, however, it spread to other tahsíls, and finally became prevalent throughout the State. Otherwise the health of the people has been good.

MANDI.

Area, 1,200 square miles; population, 174,045; gross revenue, Rs. 4,78,403; Military Forces and Police, 792; race of Chief, Rájpút; tribute, Rs. 1,00,000.

General.

22. In December 1902 the Rája, Bije Sain, whose continued ill-health was noticed in last year's report, died at the age of 57. He had been on the Gaddi from his childhood. In recognition of his general good government it had been decided to invest him at the Delhi Darbár with the K. C. S. I., and this was announced in the "Honours" Gazette published three weeks after his death.

The question of the succession to the Chiefship was still unsettled at the end of the year under report, pending the confinement of the Datárpur Ráni, whose pregnancy was reported within a few days of the Rája's death, and who was subsequently delivered of a female child. Tika Bhawáni Singh, the illegitimate son of the late Rája, who was in his father's lifetime recognised as his successor provided no legitimate son was born to the Rája, still remains at the Aitchison College.

Administrative.

23. The administration of the State has continued to be satisfactorily conducted by the Wazír, Pádha Jíwa Nand. This year again the outlay on Public Works was considerable, amounting to Rs. 65,250.

Income and Expenditure.

24. The expenditure of the State during the year exceeded the income by about Rs. 20,000, the excess being due to the Rája's illness and death, on which an expenditure of nearly Rs. 32,800 was incurred.

MALER KOTLA.

Area, 167 square miles; population, 77,506; gross revenue, Rs. 5,05,500; Military Forces and Police, 374; race of Chief, Pathán.

General.

25. In the mental condition of the Nawáb, Muhammad Ibráhím Ali Khán, there has been no improvement: otherwise his health has been good, and he is reported to be physically stronger. The Sáhibzáda, Ahmad Ali Khán, attended the Delhi Darbár as his father's representative, and as such was, as a special case, presented to the Viceroy among the Ruling Chiefs.

His Honour the Lieutenant-Governor visited the State in the beginning of November 1902.

Administrative.

26. The administration of the State continued under the management of the Superintendent, Sir Amír-ud-dín Ahmad Khán, K.C.I.E., Nawáb of Loháru, up to January 1st, 1903, when the Sáhibzáda, Ahmad Ali Khán, was entrusted with all the powers hitherto exercised by the Superintendent, subject to the condition that the Nawáb of Loháru should continue to be employed by the State and act as adviser to the Sáhibzáda. Under the new *régime* some slight reforms have been introduced and three new offices have been created so as to divide the work into three principal departments, *viz.*—

(1) General—embracing Revenue, Police, Treasury, Public Works, Education, &c.

(2) Criminal Administration.

(3) Civil Administration.

FARIDKOT.

Area, 642 square miles; population, 124,912; gross revenue, Rs. 3,56,250; Military Forces and Police, 414; race of Chief, Sidhu Jat.

27. The Chief, Rája Balbír Singh, is now 33 years of age. The administration of the State has continued to be satisfactory under the general superintendence of the Wazír, Rái Baroda Kanth Lahíri. General and Administrative.

28. The health of the people has been good, save for an outbreak of plague, which made its appearance towards the end of December 1902, and has continued up to the present time. The Rája had himself and the members of his family inoculated against the disease, thereby setting a good example, which had considerable effect. Plague.

SUKET.

Area, 420 square miles; population, 54,676; gross revenue, Rs. 1,08,831; Military Forces and Police, 55; race of Chief, Rájpút; tribute, Rs. 11,000.

29. The Chief, Rája Dusht Nikandan Sen, who is now 37 years of age, has appointed as his Wazír Seth Pana Lál, a resident of the Ferozepore District, who previously held a subordinate appointment in the State. Orders have been issued for the re-employment of the Assistant Commissioner of Kulu as Political Assistant to the Commissioner of Jullundur in connection with the affairs of this State; but so far, owing to the smooth working of the administration, the only business to claim his attention has been the investigation of certain boundary disputes with Mandi, of which, it is hoped, a satisfactory settlement will in due course be found. The Tikka has now been sent to the Aitchison College. General and Administrative.

III.—States in the Political Charge of the Commissioner of Delhi.

SIRMUR.

Area, 1,108 square miles; population, 135,687; gross revenue, Rs. 5,12,000; Military Forces and Police, 575; race of Chief, Rájpút.

30. The administration of this State continues to be conducted on the lines which have proved so satisfactory in the past. The Rája, Sir Surindar Bikram Parkásh, K.C.S.I., who is now 35 years of age, attended the Delhi Darbár, and after that proceeded to Calcutta to take his seat as Member of the Legislative Council of the Government of India, and remained there until the close of the session. His absence, however, in no way interfered with the administration of the State. General and Administrative.

The boundary dispute with Jubbal has not yet been finally adjusted, the Rája having taken objection to the line laid down by the Superintendent of Hill States as not being in accordance with the decision of Government.

KALSIA.

Area, 168 square miles; population, 67,168; gross revenue, Rs. 1,96,307; Military Forces and Police, 179; race of Chief, Jat.

31. Further steps were taken to associate the Chief, Sardár Ranjít Singh, who is now 20 years of age, more closely with the administration of the State. His civil and criminal powers were increased, and it was arranged that he should work with the Council in executive matters. In October 1902 a son was born to the Sardar by his first wife, who is a sister of the Rája of Jínd. General and Administrative.

32. This year also there was an outbreak of plague in the State, but it was not so severe as that of last year. Measures similar to those of 1901-02 were adopted, and excellent work was done by the President of the Council, Khán Bahádur Inayátullah, in carrying them out. Plague.

Financial condition.

33. A considerable amount of extraordinary expenditure had to be incurred in connection with the Sardár's presence at the Delhi Darbár, but the finances of the State are in a flourishing condition, the amount at present standing invested in Government Promissory Notes being $5\frac{3}{4}$ lakhs of rupees.

PATAUDI.

Area, 53 square miles; population, 21,933; gross revenue, Rs. 91,684; race of Chief, Afghán.

Administrative.

34. The administration of this State is still carried on by the Názim, Khán Bahádur Qásim Ali Khán, and the present arrangements will be continued at any rate until the succession "nazrána" has been paid up. An instalment of one-quarter of this, amounting to Rs. 20,000, was paid in August 1902, and a second instalment will follow this year. The finances are seriously embarrassed by the heavy payments which have to be made to the relations of former Nawábs. These amount at present to about Rs. 17,000 per annum, and the discharge of this liability and the payment of the "nazrána" absorb nearly half the total revenue of the State. It has, however, been decided that no Nawáb is to be recognized as having the power to create a permanent charge on the revenues. The Nawáb's son, Nawábzáda Ibráhím Ali Khán, is still at the Aitchison College, where he makes good progress.

Agricultural condition.

35. The agricultural condition of the State continues much as it was last year. The harvests were indifferent, and there are still arrears of previous years, though most of the current revenue was got in.

LOHARU.

Area, 300 square miles; population 15,229; gross revenue, Rs. 66,000; race of Chief, Mughal.

General.

36. The Nawáb, Sir Amír-ud-dín Ahmad Khán, K.C.I.E., continued to be associated with the administration of the Máler Kotla State, one of his brothers carrying on that of Loháru as Názim under the Nawáb's direction. On the occasion of the Delhi Darbár, which he attended, the Nawáb was granted the right to a salute of nine guns as a personal distinction.

Agricultural condition.

37. There was no perceptible improvement in the agricultural condition of the State, which continues to be most unsatisfactory, and a large proportion of the inhabitants have migrated to more favoured localities. The State owes about Rs. 50,000 to Government for famine loans, but, in view of the uncertainty of the seasons, it is impossible to say when it is likely to be in a position to make repayment.

DUJANA.

Area, 100 square miles; population, 24,174; gross revenue, Rs. 77,170; Military Forces and Police, 207; race of Chief, Afghán.

General.

38. The Nawab, Muhammad Mumtáz Ali Khán, is 37 years of age, but has no direct male heirs.

Agricultural condition.

39. The agricultural condition of the State remains practically unchanged, the harvests of 1902-03 having been, for the most part, very poor. Although, in consequence of the favourable condition of the prices of grain, there has been little actual distress, the people are, owing to a succession of bad seasons, in a very depressed condition. Of the famine loan of Rs. 20,000 made by Government in 1899-1900, Rs. 15,000 have been repaid, and the balance should be recovered during the current year.

Plague.

40. An outbreak of plague recently occurred in the Nahar iláqa of the State, the infection being traced to Rewári. At the request of the Nawáb, who showed himself most anxious for assistance and advice, the necessary arrangements were made by the Deputy Commissioner and the Plague Medical Officer of Gurgaon.

IV.—Simla Hill States.

BILASPUR.

Area, 448 square miles; population, 41,592; gross revenue, Rs. 1,57,000; Military Forces and Police, 1,021; race of Chief, Chandeli Rájpút; tribute, Rs. 8,000.

41. At the close of last year the Rája had been called upon to give his assent to certain conditions. To these he at first gave a positive refusal, which was, however, subsequently withdrawn, and an unconditional acceptance of the conditions was then submitted in writing. At his special request he was allowed to retain as Wazír Lála Hari Chand, who had been appointed by him six months previously. At the conclusion of these negotiations the Rája was granted permission to spend two months in making a tour in India, but at the end of this period he went to his house at Benares, and has not since returned to his State, in which, during the past year, he has not spent more than a month. From Benares he has submitted several representations regarding his treatment, practically withdrawing his acceptance of the conditions imposed on him, refusing to return to the State, and, at the same time, complaining of the action of Lála Hari Chand, whom he would now have it understood was appointed Wazír by the orders of Government. The condition of the State under that Wazír was satisfactory, but the settlement with the jágírdárs remains to be effected. Administrative.

BASHAHR.

Area, 3,820 square miles; population, 40,514; gross revenue, Rs. 85,000; race of Chief, Rájpút; tribute, Rs. 3,945.

42. The Chief, Rája Shamsher Singh, is now 64 years of age. Lála Mangat Rám has continued to manage the State satisfactorily. Negotiations regarding the betrothal of two of the grand-daughters of the Rája with the Rája of Káshipur, a minor under the Court of Wards in the United Provinces, were brought to a satisfactory conclusion, and the marriages were celebrated shortly after the close of the year. The Lieutenant-Governor paid an informal visit to Sarahan and Rámpur in October 1902, and received a visit from the Rája. General.

43. It has been decided that demarcation of forests in the Pabar Valley shall be effected. In the Dodra Kawar Pargana difficulties exist about the payment of revenue, and the people are inclined to be recalcitrant. In order to check the wasteful use of the forests for building purposes a light scale of fees to be charged for trees supplied to zamíndárs is being introduced, the income from which will be a State asset. Administrative.

NALAGARH.

Area, 256 square miles; population, 24,188; gross revenue, Rs. 1,30,000; race of Chief, Rájpút; tribute, Rs. 5,000.

44. The Rája, Ishri Singh, who is 70 years of age, received the honour of an invitation to the Delhi Darbár, which he attended. His condition remains unchanged, and the work of administration is almost entirely in the hands of the Council, which under the Presidentship of Lála Sundar Singh is performing its duties satisfactorily. General and Administrative.

KEONTHAL.

Area, 116 square miles; population, 10,633; gross revenue, Rs. 66,000; race of Chief, Rájpút.

45. Rája Bije Sain, who is now 26 years of age, having accepted the conditions required by Government, was granted full powers from 26th June 1902, and the Manager, Mián Durga Singh, was removed. The services of Rái Sáhib Atma Rám, who was approved by Government, were placed at the disposal of the Rája as Wazír, and he is reported to have efficiently discharged the duties entrusted to him. In order to liquidate the State debts the Rája submitted proposals for extensive fellings of his forests, but under the advice of General.

the Forest Officer they were not accepted. Owing to the considerable expense incurred by him at Delhi, where he attended the Darbár, he has not been pressed to arrange for the State debt which existed when he received his powers, but he appears to have contracted additional debts with the traders of Simla which he finds difficulty in paying. He has considerable hopes that a large sum of money will become due to him from the Kálka-Simla Railway, but the question of compensation is still under consideration.

BHAGAL.

Area, 124 square miles; population, 11,948; gross revenue, Rs. 50,000; race of Chief, Rájpút; age of Rája, 60 years; has a male heir; tribute, Rs. 3,600.

General and Administrative.

46. The administration of this State has been good. The case of the Brahmins of Barog, which was mentioned in last year's report, has been finally disposed of and the authority of the State established.

BAGHAT.

Area, 36 square miles; population, 3,819; gross revenue, Rs. 30,000; race of Chief, Rájpút; age of Chief, 42 years; tribute, Rs. 603.

Simla-Kalka Railway.

47. The ordinary administration of the State has been conducted without friction, but there has been some trouble with the coolies on the Railway, though it has not been necessary to assist the State except with advice. The question of land for the Railway is still undecided: no action has been possible as the plans have not yet been received from the Railway by the Superintendent, Hill States. The question of the Railway water-supply also will probably be attended by considerable difficulties.

Solon Cantonment.

48. During the year the Rána has paid particular attention to the sanitation of Solon, and the health of the troops has much improved. The question of obtaining a pipe water-supply for the bazár is still under consideration, the Rána being now anxious to have a supply entirely separate from that of the Cantonment.

JUBBAL.

Area, 288 square miles; population, 9,883; gross revenue, Rs. 1,52,000; race of Chief, Rájpút; tribute, Rs. 2,520.

General.

49. The most important event in this State during the year was the death of Wazír Bhagwán Dás, the last of the hereditary Wazírs. As his death was very sudden and occurred at the close of an enquiry into his administration of the State which had been ordered owing to the accusations of the Dehlati Ráni, mother of the Rána, and the result of which was expected to be favourable to the Wazír, suspicions of poison were not absent. Investigations, however, made at the time failed to confirm them. After the death of the Wazír, Mián Durga Singh, who had previously been in Keonthal, was appointed Manager of the State, and the investigations made by him show that the Ráni's accusations against the late Wazír were not altogether without foundation. The debts of the State have been found to be greater than as previously ascertained, and they now amount to Rs. 1,73,366, to which a further sum of Rs. 3,000 will probably have to be added on account of debts still under enquiry. The state of affairs might have proved much worse had the forest revenue been paid to the Wazír, but for the past two years all forest revenue has been paid to the account of the Superintendent, Hill States, who has disbursed the expenditure. It is, however, anticipated that the balance in hand at the end of the current year will be sufficient to pay off the whole debt, though, unless the forests are leased to contractors, this will not be done, as it will be necessary to keep money in hand to meet forest expenditure. Rána Gyán Chand, who is now 16 years old, and his two brothers have attended the Aitchison College during the year, and are reported to have done well. The mother of the Rána has suggested that a Council should be appointed from the officials of the State to assist the Manager.

The suggestion was approved, but the detailed proposals which she was asked to submit have not yet been received. Arrangements were made during the year for the marriage of the Rána's sisters to the Rája of Keonthal.

KUMHARSAIN.

Area, 90 square miles; population, 5,786; gross revenue, Rs. 25,000; race of Chief, Rájpút; age of Chief, 61 years; has male heir; tribute, Rs. 2,000.

Begar.

50. There has been some trouble in this State, chiefly in connection with the question of "begár." The important stage of Narkhanda is situated in the State, and the requirements of travellers are always heavy. In addition to this the construction of the mule road to Luri has practically caused a new stage to be opened. It has therefore become necessary to redistribute the allotment of "begárís," a task involving the investigation and decision of certain general questions which, left ill-defined at the recent settlement, have since given rise to misrepresentation and misunderstanding.

Administrative and General.

51. The administration is in the hands of a Manager, Lála Dhanwant Rái, whose position has been rendered somewhat difficult by the intrigues of the insane Rána's brother, Mián Indar Singh, who has been inciting the people against the present arrangements. Enquiry has shown that the Mián's presence in the Darbár is not desirable, and orders have been issued for him to be provided with a "jágír," on which he will be required to reside.

KANETI.

Area, 100 square miles; population, 1,325; gross revenue, Rs. 4,000; race of Chief, Rájpút; age of Chief, 12 years.

General.

52. There was a slight disturbance in this State during the past year, a section of the people refusing to pay their revenue, perform "begár" or recognise the authority of the Manager, Gobind Rám, by whom the State has continued to be administered. The alleged reason was the Manager's misconduct in both public and private life, but investigation showed that the real reasons for their attitude were their objection to the revision of the settlement, the term of which had expired, and their resentment of the Manager's action in investigating the unauthorised cutting of a valuable deodár forest in which they were implicated. The insubordination culminated in an attack on the State Jail and the rescue of one of the prisoners, followed by a demonstration against the Manager. On the arrival, however, of a few Government Police the offenders at once submitted, voluntarily paid a fine, and gave security for their good behaviour in the future. The Tikka, who is now about 12 years old, is an active intelligent boy, and shows considerable promise.

THEOG.

Area, 144 square miles; population, 2,742; gross revenue, Rs. 5,000; race of Chief, Rájpút; age of Chief, 43 years.

Administrative.

53. There has been some trouble in this State in connection with the completion of the settlement, which was used by the Miáns and other men of influence in the State as a weapon for agitating against the Tikka, the people, who objected to a regular settlement, being only too ready to believe themselves the victims of oppression and injustice. The disaffected majority commenced a regular boycott of the Tikka, who made no attempt to assert his authority, and finally, when matters became unbearable, applied to be divested of his powers. Sardár Bhagwán Singh of Ambala was consequently sent to the State as Manager with full powers of every sort.

REMAINING HILL STATES.

54. The remaining States call for no detailed notice. The Thákur of Taroch and the Rána of Mailog died during the year, and being succeeded by minors, the administration is being carried on in the case of the first named State by Wazír Mathra, and in the case of the second by a Council of the leading men of the State. Dhámi continues to be well administered

by the Rána. The management of Kuthár by Gyán Singh has been satisfactory and all debts have been paid off. The Chief, Rána Jagjít Singh, has attended the Aitchison College, where he has done well. There has been no change in the condition of affairs in Koti. The general health of the States has been good and no serious epidemic has been reported. A sharp outbreak of cholera, as well as a few cases of plague, occurred in the Baghát State, but neither disease spread. There was also an outbreak of plague in the town of Nálágarh, but here again it did not extend to the villages of the State. The rabi crop of 1902 was generally poor, owing to the almost total failure of the winter rains: but the kharíf crop of 1902 was an exceptionally good one, the monsoon rainfall, though considerably below the average, being well distributed and especially suitable for agricultural operations. The winter rains of 1902-03 were late and scanty. The deficiency of rainfall during the past two years has had a marked effect on the springs in the lower hills, where, at the close of the year under report, many perennial springs were reported to be already dry. Other necessary information in regard to these States is given in the statement below:—

No.	State.	Area in square miles.	Population.	Revenue.	Tribute.	Name of Chief.	Caste or race.	Age.	Whether male heirs or not.
				Rs.	Rs.				
1	Bhajji	96	6,425	23,000	1,440	Rána Durga Singh	Rájpút	60	Yes.
2	Mailog	43	4,202	20,000	1,440	Name not yet taken ...	Do.	5	No.
3	Balsan	51	3,149	9,000	1,080	Rána Bír Singh	Do.	39	No.
4	Dhámi	26	2,045	15,000	720	Rána Híra Singh	Do.	26	No.
5	Kuthár... ...	20	1,933	11,000	1,000	Rána Jagjít Singh	Do.	17	No.
6	Kunihár ...	80	1,045	4,000	180	Thákur Tej Singh	Do.	68	Yes.
7	Mangal ...	12	562	900	72	Rána Tilok Singh	Do.	52	Yes.
8	Bíja	4	503	500	180	Thákur Ude Chand... ...	Do.	76	Yes.
9	Darkuti ...	8	310	800	...	Rána Rámsaran Singh ...	Do.	60	Yes.
10	Taroch	67	1,877	40,000	288	Thákur Surat Singh ...	Do.	16	No.
11	Sángri	16	1,206	2,400	...	Rái Híra Singh	Do.	52	No.

V.—Other States.

BAHAWALPUR.

Area, 20,000 square miles; population, 720,877; gross revenue, Rs. 24,00,000; Military Forces, including Police, 1,431; race of Chief, Dáúdputra.

General and Administrative.

55. The administration of the State remained during the year under the guidance of the Superintendent, Colonel L. J. H. Grey, C.S.I. The Nawáb, who is now 20 years of age, continues to make excellent progress, both his character and his abilities having undergone considerable development, and there is every reason to hope that he will prove himself a capable and conscientious ruler. During Colonel Grey's five months' absence from the State in Simla and afterwards on short leave to England the Nawáb carried on the duties of Superintendent. The work of demarcating the fixed boundary between the State and the adjacent districts of Mooltan and Muzaffargarh has been concluded, and the similar work in progress on the Dera Gházi Khan boundary is practically completed. In October 1902 His Highness offered his Imperial Service Camel

Transport Corps for employment in Somaliland, a loyal offer which was cordially acknowledged by the Government of India, though it was not taken advantage of. The Nawáb attended the Delhi Darbár, and, in the end of January 1903, the State received a visit from His Honour the Lieutenant-Governor.

CHAMBA.

Area, 3,216 square miles; population, 128,005; gross revenue, Rs. 5,11,583; race of Chief, Rájpút; tribute, Rs. 5,000; age of Chief, 36 years. The Chief has no direct male heir.

General.

56. In October 1902 the Rája was attacked by a serious illness which has incapacitated him ever since and necessitated his continued treatment by an European Medical Officer. Pending his recovery, the administration of the State was satisfactorily conducted by his brother, Mián Bhúri Singh. The year has not been a prosperous one for the State: the harvests were comparatively poor; cattle disease has been very prevalent; and both crime and civil legislation increased. The State Hospital, an institution of which the State has reason to be proud, continued to do useful work.

Frontier Affairs.

Conduct of tribes.

57. The peace of the border has been undisturbed throughout the year, and the only noteworthy offences which have occurred were the raiding of Ghilzai flocks by certain Haddiánís and Durkanís with the connivance and assistance of tribesmen in the Balúchistán Agency in December and January 1902-03. A number of the offenders have been brought to trial and sentenced to various terms of imprisonment, and there has been no further repetition of offences of the kind.

Jirgas.

58. At the jirgás held at Fort Munro in September 1902, the Zhob and Thal-Chotiáli Agencies were represented by the Assistant Political Agent and Deputy Commissioner respectively. No fewer than 304 cases were taken up in which these Agencies were concerned, of which number 91 were exclusively their own. 264 cases were disposed of. The minor jirgás, mentioned in last year's report, have been useful in disposing of petty cases, and arrangements have now been made with the Deputy Commissioner, Dera Ismail Khan, for a similar jirga to meet periodically at Vehoa for the settlement of petty cases between that district and Dera Gházi Khan. Criminal offences referred to jirgás throughout the year have shown a satisfactory decrease from 351 to 286. Civil references, on the other hand, have increased from 172 to 366, a not unfavourable sign indicating less inclination on the part of the people to take the law into their own hands.

Border Military Police.

59. Owing to the absorption of the footmen of the old Border Military Police into the new corps, and the permanent establishment of a new post at Mubárki, it has been found necessary to sanction an increase of 20 mounted men for the Sillahdári force.

Season.

60. The autumn rains of 1902 were fairly good and the condition of the Hill Balúchís showed signs of improvement. The people, however, suffered considerably during the winter from outbreaks of small-pox and cerebro-spinal meningitis.

Condition of the People.

Scarcity in Hissar.

61. The scarcity in Hissar which prevailed in the previous year continued during the year under report. Owing to the lack of rain the rabi crop of 1902 was a failure, and in May of that year it became necessary to give 2,240 persons gratuitous relief: 89 others were supported in the poor-house at Hánsi. Owing to a fall of rain in June the situation improved and the poor-house was closed at the beginning of July. It was also decided that it was not necessary

to continue giving advances of takávi for digging village tanks. In August the rainfall was deficient and prices rose slightly. Three-quarters of the crops on unirrigated lands were lost. Fortunately some rain fell in October, and in November the District Officer reported that the number of those in receipt of gratuitous relief had fallen to 900. In the middle of November gratuitous relief was stopped, and from that date scarcity may be considered to have ceased. In addition to the remission of all previously suspended revenue amounting to 11 lakhs, which was noticed in last year's report, indirect relief was given by the suspension of Rs. 75,883 in the rabi harvest of 1902, and Rs. 4,42,216 in the following kharíf, and liberal advances for seed and bullocks were also given. During the above-mentioned period of scarcity a certain proportion of the able-bodied men emigrated temporarily to other districts in search of work, and a number of these found employment at Delhi on the preparations for the Darbár. It was fortunate that fodder never became very scarce, and that on the whole prices remained remarkably stable. It was chiefly owing to the cheapness of food-grains that the people were not in the bad condition they were in during the famine years of 1896-97 and 1900-01.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the publications noted below :—

Realization of the revenue *Revenue and rent-paying classes* *Surveys*	Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1901 to 30th September 1902.
Surveys (other than land revenue)	General Report on the Operations of the Survey of India for the year ending 30th September 1902.
Settlements	Report on the Settlement Operations for the year ending 30th September 1902.
Land Records	Report on the Operations of the Department of Land Records and Agriculture, for the year ending 30th September 1902. Report on the working of the Punjab Alienation of Land Act, XIII of 1900, for the year ending 30th September 1902.
Waste lands and Government Estates.	Report on the Chenab, Jhelum, Chunián and Sohág-Pára Colonies for the year ending 30th September 1902.
Wards	Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1902.]

Realisation of the Revenue.

Scope of report.

62. The latest information is that contained in the Land Revenue Report for the year ending 30th September 1902, which deals only with the territory now constituting the Province of the Punjab.

Fixed Land Revenue.

Demand and Collections.

63. The total demand was slightly over 206 lakhs, of which amount only 86·6 per cent. was recovered, heavy suspensions being chiefly required in the Delhi Division owing to bad seasons. Deducting suspensions the actual demand was recovered on the whole with ease.

Collection of arrears.

64. Collections on account of previous years show a remarkable decrease from Rs. 21,58,312 to Rs. 2,14,092. This, however, is easily explainable, as the collections on account of previous years in 1900-01 were, owing to good harvests, much larger than usual, while the poor harvests in the year under report precluded any large recoveries.

Increase and decrease in Fixed Land Revenue Demand.

65. The demand for Fixed Land Revenue as finally determined for the year under report (Rs. 2,06,17,364) shows a net increase of Rs. 1,31,645 over that for the previous year calculated on the area which now constitutes the Province. The main portion of the increase is represented by a sum of Rs. 1,78,700 due to revision of assessment in the Jhelum District. River action again proved favourable and accounts for a net increase of Rs. 9,090, the largest increases occurring in Lahore (Rs. 13,095), Gurdáspur (Rs. 6,880) and Siálkot (Rs. 4,869). Extension of cultivation in the Chunián Colony accounts for an increase of Rs. 5,548 in the case of Lahore, and an item of Rs. 7,327 in Mooltan is due to assessments on wells brought into use and on wells the protective leases of which had expired during the year. The reduction of Rs. 2,33,830 in the fixed assessment of the same district has been caused by the substitution of fluctuating for a fixed assessment. The further item of Rs. 14,106 in Mooltan is due to remissions on wells which have fallen out of use during the year.

Suspensions and remissions.

66. The unfavourable nature of the year under report necessitated heavy suspensions of fixed revenue amounting to Rs. 25,59,029. These for the most part had to be given in the districts which suffered most during the famine years, as they unfortunately were the districts in which the seasons proved worst. Of the total sum suspended the Delhi Division alone contributes Rs. 14,24,428. It is a matter, perhaps, which calls for some comment that it was found necessary to suspend Rs. 1,16,170 in Kángra. There was a widespread failure of crop in the district, and the suspensions appear to have been justified by the fact that, although the people generally are averse to taking suspensions, only Rs. 24,974 out of the suspended revenue was paid in voluntarily.

As regards suspensions for the kharíf harvest of 1901 the ordinary rules were followed, but owing to the total failure of the winter rains and the consequent absence of any *bárání* crops in many districts the Financial Commissioner ordered that in proposing suspensions for the rabi harvest no differentiation between rich and poor revenue-payers need be attempted. This order was issued in pursuance of the conclusions arrived at in the discussion of the subject which was referred to in last year's report; namely, that in times when distress is widely and generally felt and suspensions have to be given almost wholesale, it is not possible to work on any but broad principles.

The subject of remissions deserves special prominence in the present report on account of the large amount of famine arrears which were written off under the orders of the Government of India. This was rendered possible owing to the surplus which was found to exist in the general revenues of the country at the close of the last financial year. Permission was given to remit arrears of suspended *khálsa* revenue to the amount of Rs. 39,30,000 in the affected tracts of the Punjab.

In all these cases the suspended sums which were remitted were the result of famine or severe scarcity and so were within the scope of the Government of India's orders. The relief given to the people of the affected tracts by these remissions was very great, for a weight which they must have feared might at any time fall and crush them had been hanging over their heads for long. The relief given to the revenue accounts was also no small matter. Another point connected with these remissions which render them specially notable in the history of our revenue administration is that they occurred in the Coronation year, and are by many people connected with that auspicious occasion.

In addition to the *khálsa* revenue which has been remitted there is also a sum of Rs. 1,19,000 under suspension on account of assigned revenue and service commutation money which, had it been *khálsa*, would have been remitted under the above quoted orders of the Government of India. The Financial Commissioner has recently referred to Government the question whether the sum under suspension should not also be remitted, and if so, whether compensation should be paid to the assignees; and a reference has been made to the Government of India in the matter.

Balances of fixed Land Revenue of preceding years.

67. The balance on account of preceding years amounted to Rs. 37,80,611 as compared with Rs. 39,76,166 in the previous year. The following items compose it;—

	Rs.
Recoverable—under suspension	99,100
Ditto not under suspension	6,995
Undetermined	1,78,103
Irrecoverable	34,96,413
TOTAL	37,80,611

Of the undetermined balance Rs. 1,76,602 comes from Miánwáli alone and is mainly on account of the revenue of wells which have gone out of use during the last fourteen years. The amount will be dealt with in

connection with the settlement now in progress. The irrecoverable balance includes the sums which were remitted on account of famine arrears which with other sums remitted on account of seasonal calamity such as hailstorms and locusts amounted to Rs. 29,98,171. In addition to these remissions Rs. 4,40,054, which had accumulated under the expiring settlement in Jhelum, were writtenoff when the new settlement came into force.

Balances of the year under report.

68. Owing to the poorness of the kharíf harvest of 1901 considerable suspensions were necessary, and the closing balance of the year under this head accordingly shows a large increase over that reported for the previous year, having risen from Rs. 6,11,993 to Rs. 26,54,315. This is composed of the following items :—

	Rs.
Recoverable—under suspension	17,06,657
Ditto not under suspension	45,114
Undetermined	5,731
Irrecoverable	8,96,813
TOTAL	26,54,315

The amount of recoverable revenue not under suspension shows a most satisfactory decrease from Rs. 97,564 to Rs. 45,114 only. Rohtak, Ambala, Simla and Jullundur report a clear sheet. The balances are in no case so large as to necessitate any comment.

The irrecoverable balance shows a large increase from Rs. 3,01,898 to Rs. 8,96,813 of which Rs. 8,38,531 had to be remitted.

FLUCTUATING LAND REVENUE.

Total fluctuating Revenue.

69. The total for fluctuating revenue temporarily excluded from the fixed land revenue rent roll has risen from Rs. 84,148 to Rs. 1,03,699. The increase occurred mainly in Mooltan and Muzaffargarh, and is due mainly to the assessment on wells newly brought into use during the year and to collections for broken periods in the Sinánwán Tahsíl of the revised assessment. The total for fluctuating revenue permanently excluded from the fixed rent roll has, however, slightly decreased from Rs. 29,35,748 to Rs. 26,44,562. Considering the dryness of the year it is almost a matter for surprise that there was not a larger decrease. The fall is fairly uniform in the majority of districts, Gurgaon, Delhi and Jhang alone reporting any considerable increases. The reason for this in Gurgaon was that, owing to the scanty rainfall, less land was submerged and more was accordingly available for cultivation. The same explanation accounts for the increase in Delhi. No reason has been assigned for the increase of Rs. 10,609 under the head "fluctuating assessment of other lands" in Jhang. In Montgomery there has been a phenomenal decrease under this head from Rs. 2,08,445 to Rs. 92,339. This was due to the year 1900-01 having been a particularly favourable year, while the year under report was very unfavourable both as to rainfall and water supply in the rivers.

Fluctuating assessment of canal-irrigated lands.

70. The total collections under this head also (Rs. 16,23,647) show a decrease as compared with the year before (Rs. 18,04,225). The only district which shows an increase is Jhang, where the income has risen from Rs. 7,09,478 to Rs. 9,05,713. This is due to extensions on the Chenab Canal. In Mooltan the decrease (Rs. 4,53,176 to Rs. 2,98,618) is especially noticeable and shows how susceptible this district is to any variation in the water-supply in the rivers.

Advantages of fluctuating assessment.

71. The advantages of a fluctuating assessment in tracts where violent fluctuations in the cropped area and outturn of crops are likely to occur, are now clearly recognised and the area under fluctuating assessment is gradually increasing. In the earlier forms of fluctuating assessment the rates were usually pitched low and charged on the cultivated area, but in the systems introduced in recent years an improvement has been effected by making the rates higher and assessing them only on the matured area, proportionate reductions being made on poor crops, increasing as the outturn diminishes. The only drawback to this system is the amount of extra work in the way of supervision which it entails and the extra power it places in the hands of the Patwári. It is, therefore, natural to find that the people at first are inclined to be sceptical as to the advantages, but it is believed that with care and attention our Revenue establishment, particularly in the subordinate ranks, will prove equal to the task. The system has lately been introduced in Mooltan, and practically the whole of the district is subject to it. It is, therefore, encouraging to find that in place of the distrust which the people evinced as to its working on its introduction, it is now reported that in bad years they admit that it has its advantages. During the year the larger part of the Fázilka Tahsíl of Ferozpore has been placed under fluctuating assessment, and here apparently the people have not got beyond the distrustful stage. The position is perhaps here accentuated by the fact that the rates imposed are considerably higher than those which prevail in the adjoining parts of the district. The system has also been extended to part of Muzaffargarh, which district resembles Mooltan in its general features. It seems to have been well received by the people on the whole. The Jhang District is at present under settlement, and, as it was found that, owing to the large migration which had taken place into the Colony, many wells had gone out of cultivation and the fixed assessment was pressing hardly on the people, sanction was obtained to the proposal to offer the alternative of a fluctuating assessment in one of the forms which had been sanctioned at last settlement, as a temporary measure, pending a decision on the general question during the settlement now in progress. Thirty-six villages accepted the offer with the result that the assessment of these villages for rabi 1902 amounted to Rs. 7,880 as compared with the old fixed assessment of Rs. 12,780. In Montgomery a somewhat complicated system is in force in some of the villages irrigated from the Inundation Canals. Under present rules the canal advantage revenue is suspended and remitted under the same rules as ordinary land revenue. This has not been found to work very satisfactorily and a proposal is under consideration for treating this revenue in the same way as *abiána* is treated as to assessment and remissions in case of failed and partially failed crops. The Deputy Commissioner of Karnál notices a tendency, which he has observed in the villages under fluctuating assessment in that district, for the system to supply an inducement in certain cases to keep culturable land as pasture. The question is one which will, no doubt, be considered fully during the coming re-assessment of the district.

Miscellaneous Land Revenue.

Total Revenue.

72. The total collections for the year amounted to Rs. 7,68,242 as against Rs. 12,69,936 in the previous year. Sale proceeds of waste lands, including *nazarána*, amounted to Rs. 4,07,963. There was a decrease under the head "Canal Survey Fund" (Rs. 69,113 to Rs. 29,282), probably due to the change in system, recoveries under this head now being made by an acreage rate collected from the produce of the second crop after the land is broken up for cultivation. The receipts for temporary cultivation show a marked decrease from Rs. 1,99,981 to Rs. 85,474. This is due principally to the increase in the permanent allotments in the Chenab Colony, and the consequent contraction of the area available for temporary cultivation. The decrease under head "Other items" (Rs. 3,58,165 to Rs. 69,728) is large and occurs almost entirely in Jhang (Rs. 2,98,549 to Rs. 16,685). The decrease is due to collections on account of temporary cultivation having been shown under this head last year.

Coercive processes.

73. As was to be expected considering the large amount of suspended revenue which had been remitted in the districts most affected by famine, and where consequently only so much of the current demand as was not suspended was recoverable there has been a sensible decrease in the total number of processes issued from 45,547 to 39,604. The decrease is fairly evenly distributed over the different heads, but is specially noticeable in the case of imprisonment where the figures have gone down from 58 to 13, and in the case of farms, and sales of immoveable property where the numbers last year were 10 and one respectively compared with 25 and 18 in the previous year. Naturally the districts which had been affected by famine show the largest decreases for the reason just given above, but still there appear to be most violent fluctuations from district to district in the figures for the year under report for which it is difficult to give any very adequate explanation except the idiosyncrasies of Revenue Officers and especially Tahsíldárs. The number of processes which issued for the recovery of arrears of water-rates appears to have been generally small; in Amritsar, however, it reached a considerable figure, 776. In Ambala and Shahpur the collection of *takávi* appears to have given some trouble.

Surveys.

TOPOGRAPHICAL WORK.

Survey of India.

74. During the year the following field work was done by No. 18 Party (Punjab) Survey of India:—

(*i*) A detachment commenced work on the 15th October 1901 on the completion of traverse of the Pákpattan Tahsíl of the Montgomery District as a basis for map compilation. This was completed by the end of 1901 and the party was then employed on the main traverses for the riverain boundary survey until the end of April on the Sutlej, Chenab and Indus.

(*ii*) A detachment worked from the 15th November 1901 to the 20th April 1902 in the field and completed the map revision of the Gugera and Dipálpur Tahsíls of Montgomery and the Chunián Tahsíl of Lahore, an area of 3,000 square miles.

(*iii*) The work of demarcating the boundaries of estates in Simla has been practically finished, but it will still take some time before the map is completed.

(*iv*) A Topographical detachment was detailed for the completion of the unsurveyed areas in the Native States of Balsan, Jubbal and Taroch, and portions of Terhi Garhwál.

Outturn of work.

75. The outturn of work for the year in square miles and the cost rate thereof are shown in the following table:—

TOPOGRAPHY.	Area in square miles.	Cost per square mile.
		Rs.
4 inch scale...	23	74·3
2 „ „ ...	43	53·7
1 „ „ ...	255	10·1
Traversing ...	1,888	28·3
Map revision	3,000	6·9
Map compilation ...	5,210	2·0

BOUNDARY DEMARCATION.

Riverain Boundaries.

76. Progress was made during the year in laying down fixed boundaries under the Riverain Boundaries Act, 1899.

Orders were passed sanctioning the fixed boundaries for villages on the Jhelum between the Jhelum and Gujrát Districts demarcated by Mr. Talbot, and on the Sutlej between Ferozepore and Lahore demarcated by Mr. King. Mr. Parker also demarcated the remaining part of the boundary between these two districts, and orders regarding this line have since been passed by the Financial Commissioner. The work of laying down a fixed boundary between Baháwalpur and the districts of Muzaffargarh and Mooltan was still uncompleted when the year closed, but it was hoped that it would be concluded during the following cold weather. The work of laying down a fixed boundary between Dera Gházi Khan and Muzaffargarh has been completed and the line duly sanctioned.

Settlements.

Muzaffargarh.

77. During the year orders were passed on the Assessment Report of the Alípur and Muzaffargarh Tahsíls and the assessments were announced. The new demand is very largely of a fluctuating character. The estimated increase is Rs. 1,22,000, which is at the rate of 21 per cent. Operations were concluded in June 1903. The settlement lasted for five years and nine months, and cost a trifle over three lakhs.

Sirsa-Fazilka.

78. The work in the Fázilka Tahsíl was completed in the first half of the year, and that in Sirsa was nearly finished at its close. The Settlement Officer went on leave early in the present year, and having now returned will carry out what remains to be done as Deputy Commissioner of Hissar. The expenditure was rather more than a lakh-and-a-half, and the yearly increase of revenue secured did not fall far short of that sum. Since the previous settlement the conditions of agriculture in Fázilka have been revolutionized by the introduction of canal irrigation. The Settlement Officer has reported on the revision of the canal occupier's rate, and a further increase of revenue will be obtained when orders have been passed on his proposals.

Mianwali and Dera Ghazi Khan.

79. The cis-Indus part of Captain Crosthwaite's charge includes 341 estates in the Miánwáli, and 32 in the Dera Gházi Khan, District. This large tract is divided into two assessment circles, the Kachchhi or Indus Valley and the Thal. During the term of the expired settlement the latter has been far from prosperous. Orders on Captain Crosthwaite's proposals for the Kachchhi and Mr. Hailey's for the Thal were passed soon after the close of the year. An enhancement of Rs. 42,000 has been secured in the Kachchhi, while the Thal demand has been reduced by Rs. 13,000. But the real reduction in the Thal is much less than the latter figure would suggest, for the average collections of recent years have fallen short of the demand of Mr. Tucker's Settlement by Rs. 10,000. The settlement of the Punjab part of Captain Crosthwaite's charge, when complete, will have cost about two lakhs.

Attock, Jhang, Hafizabad, Rawalpindi.

80. The settlements of Attock and Jhang began in October 1901, that of Háfizabad in June 1902, and that of Ráwalpindi in October 1902. The old maps are so accurate that complete remeasurement will be rarely required in Attock and Háfizabad, and will probably be dispensed with in many of the Ráwalpindi villages. In canal estates in Háfizabad, however, there has been much *kilabandi*, *i. e.*, relaying of field boundaries in survey squares measuring a little over an acre each. Complete remeasurement is being carried out in Jhang. None of these settlements were far enough advanced to allow of any assessment proposals being submitted during the year.

Land Records.

Prefatory.

81. The section on Land Records was last year for the first time, under orders of the Government of India, made an integral part of the Administration Report, and the part played by the Patwári and Kánúngo in the Punjab towards maintaining the system of land records was fully described in Sections 216 to 231 of last year's report. The information there given is of a permanent nature, and it is not necessary to repeat it this year.

Tours.

82. The Director of Land Records inspected all the tahsíls in the Gurgaon District and some of the tahsíls in the districts of Delhi, Gujránwála, Gujrát, Jhelum, Kángra, Hoshiárpur, Jullundur, Mooltan, Rohtak, Karnál, Ambala, Amritsar and Ferozepore.

LAND RECORD ESTABLISHMENTS.

Patwaris.

83. There is no lack of candidates for the post of Patwári. The number of accepted candidates on the register during the year was 1,386. The number of new appointments during the year was 415. Considering the excess of candidates over appointments, it should be found possible to give a larger number of appointments to candidates of the agriculturist class. Patwári Schools were opened during the year in the districts of Delhi, Rohtak, Gurgaon, Ambala, Ferozepore, Jullundur, Amritsar, Ráwalpindi and Dera Gházi Khan. The standard rates of pay of Patwáris which have been agreed to by Government are Rs. 14, Rs. 12 and Rs. 10 per mensem respectively for the 1st, 2nd and 3rd grades. 25 per cent. of the total strength will belong to the 1st grade, 50 per cent. to the 2nd, and 25 per cent. to the 3rd grade. It is proposed to revise the Patwári Establishment of each district in accordance with these standards at the revision of the settlement of the district. The income of the Patwár Fund during the year amounted to Rs. 12,62,410 and the total expenditure to Rs. 11,76,738. The Patwári Fund has been provincialized.

Kanungos.

84. 213 new candidates were entered on the registers. 97 of these were Patwáris. Most of the rest had passed the Entrance Examination. There is an increasing tendency for young men who have received a fair education to enter service as Patwáris in the hopes of promotion. Examinations for the post of Kánúngo were held at 8 selected centres. The total number of candidates examined belonging to Punjab Districts was 191, of whom 105 completed the examination, and 20 were partly successful. Besides these men, 20 candidates for employment in Native States were also examined, of whom 10 succeeded in passing the test according to the standard required for the Punjab. It has been decided to increase the pay of Kánúngos. 13 Kánúngos were accepted as candidates for Náib Tahsíldár, and 3 Sadr Kánúngos were appointed Tahsíldárs. In order to secure uniformity of standard in both Provinces the examination of Kánúngos and Náib Tahsíldárs in the Frontier Province has been left with the Director of Land Records of the Punjab.

STATISTICAL INFORMATION DERIVED FROM THE LAND RECORDS.

Registration of titles.

85. Information regarding crops and irrigation will be found in Chapter IV. Not the least important statistics furnished by the Land Records Agency are those relating to changes of title.

Mutations.

86. The total number of mutations attested during the year was 552,634. The district figures show a considerable decrease in the total number of transfers attested compared with the figures for last year, except in Hoshiárpur, Jullundur, Ludhiána and Siálkot, where the mortality from plague accounts for a great increase in transfers by inheritance. Elsewhere the decrease in the total number is attributed to the operation of the Alienation of Land Act. The number of pending cases shows also a corresponding decrease.

Gifts and exchanges.

87. The total area transferred by gifts and exchanges (95,283 acres), is considerably lower than it was in 1900-01, when it amounted to 154,222. The former figure, however, excludes 71,584 acres transferred by exchanges among the tenants in the Chenab Colony, while the latter total includes such transfers. The figures are accordingly not widely divergent and call for no particular comment.

Mortgages.

88. The total area transferred by mortgages with possession, or by order of a court for debt, amounted to 305,869 acres, of which 207,501 acres were cultivated. The corresponding totals for 1900-01 were 438,113 and 325,084 acres respectively, while the mortgage money has fallen from Rs. 2,07,78,248 to Rs. 1,29,64,793. This remarkable decrease, which is not in any way due to the figures for 1900-01 being above normal is entirely due to the Alienation of Land Act.

Redemptions.

89. The total area redeemed from mortgage during the year was 251,597 acres, representing Rs. 79,80,949 mortgage money discharged. The corresponding figures for 1900-01 were 298,150 acres and Rs. 1,01,96,567. Considering the excellent rabi crop of 1901, the above figures cannot be viewed as otherwise than disappointing.

Sales.

90. The figures for sales also show a material decrease over those for the previous year, having decreased from a total area of 366,246 acres sold for Rs. 1,61,82,014 to 283,015 acres sold for Rs. 1,07,06,954. This must have been mainly due to the effects of the Alienation of Land Act, though the poorness of the harvests may also have contributed something to produce the result. The decrease in the total number of transactions (61,562 to 45,783), is also undoubtedly due to the effect of the Alienation of Land Act.

Land under mortgage.

91. The total area of proprietary cultivated land under mortgage shows a slight decrease from 3,391, 499 to 3,352,637 acres, which gives a percentage of 12·5 on the total cultivated area of the Province compared with 13 per cent. in 1900-01 on the total cultivated area of the old Province, including the frontier.

Waste Lands and Government Estates.

General.

92. The table in paragraph 97 of last year's report shows an area of 2,501,417 acres held on lease from Government. The greater portion of this area is situated in districts in which schemes of colonization have been or are being carried into effect. The largest areas are in the undermentioned districts:—

District.	*Colonization scheme.*	*Area.* Acres.
Jhang and Gujránwála ...	Chenab Canal	1,761,917
Mooltan	Sidhnái Canal	340,760
Montgomery	Lower Sohág-Pára	141,714
Shahpur	Jhelum and Inundation Canals ...	74,554
Lahore	Lahore Rakhs	50,639

The above areas do not exactly correspond with the areas colonized, as both on the Chenab and on the Sidhnái and Sohág-Pára Canals there are additional areas in the hands of auction purchasers and lessees who have acquired proprietary right. In Mooltan, Montgomery and Lahore there are Government lessees holding lands outside colony limits. The Shahpur leases are held mostly by local men. Colonisation in the Jhelum Canal Colony commenced during the year. The provisions of the law affecting Government tenancies are described in the Land Tenure section of last year's report, Chapter I.

Chenab Colony.

Progress in colonisation.

93. The area allotted during the year amounted to 120,584 acres, bringing the gross allotted area to a total of 1,701,130. No further allotment on the Jhang Branch is at present possible. The Gugera Branch shows a net increase of 72,170, the gross total being now 709,570 acres. Nearly all the better class of land on this branch has been allotted. The Rakh Branch shows an increased cultivated area of 7,524 acres, the Jhang Branch of 39,410, and the Gugera Branch of 68,821. The rule of succession in the colony is not satisfactory, because the Act and Conditions permit unlimited succession by collaterals, and thus defeat to a certain extent the objects of original selection. The great majority of grantees have now constructed their houses. The improvement has been most marked on the Bhawána Branch, where there was the greatest room for it. Since the beginning of the colony up to the end of September 1901, 202 new wells had been sunk, though many more were then in process of construction. In the present year 195 have been completed, 453 more are under construction, and at the close of next year there is little doubt that almost every village which can afford to do so will have sunk its well. In some parts of the colony there is an incipient state of rivalry for the possession of the smartest and cleanest village site, resulting in the maintenance of sweepers who are entertained for the sole purpose of keeping the lanes and streets clean. The last census returns showed a population of 8 lakhs, but the population is now close on a million. The need for walls and houses attracts a great number of Pathán labourers in the cold weather months, when they are quite a feature of the colony; but the greatest difference from the rest of the Punjab lies in the paucity of women.

The health of the colony has been decidedly good. In a colony village each family is practically segregated; the compounds are large, and even the stay-at-home folk live much more in the open air than in the ordinary cramped village, and when plague breaks out they can camp in their own compounds, if need be; the villages are much further apart than is usual elsewhere; and the inhabitants of neighbouring villages are not closely bound by ties of relationship which make it necessary to meet in lamentation over the remains of departed friends. It is to be hoped that these features will offer some resistance to plague if it breaks out seriously in the colony. Drainage schemes have been sanctioned and started in most of the larger towns. The colony is not yet sufficiently provided with Primary Schools. Metalled roads are also badly needed, and several are in course of construction. More direct railway communication with Lahore is also urgently required, and a proposal to construct a line from Sángla to Shahdára is under consideration. Proposals have been submitted to the Government of India for the formation, with effect from the 1st April 1904, of a new district—to be called the Lyallpur District—out of the colony area.

THE JHELUM COLONY.

Scheme of the Colony.

94. Work on this colony started in November 1901, and during the greater portion of the year the Colonization Officer was engaged in making preliminary arrangements. The change of plans involved in introducing the scheme of colonisation on horse-breeding conditions, as a result of the recommendations of the Horse-breeding Commission, necessitated an entire reconsideration of the original scheme. The whole of the 402,000 acres originally intended for peasant colonists will now be allotted either to peasant or *nazarána* paying grantees on horse-breeding conditions. Each peasant grantee must maintain one brood mare, and other grantees 1 brood mare for each 1½ squares allotted. The remaining 138,000 acres will be allotted as originally intended. Succession to all grants will be according to the rule of primogeniture with the exception of those holding grants without horse-breeding conditions and those holding *nazarána* grants of the 3rd class. Occupancy rights only will be conferred on the grantees, and each grantee must plant two trees per acre allotted. 4,400 acres have been set aside for grants for military services. Their allotment has been left entirely in the hands of the Military Department, but horse-breeding conditions will attach to grants to Native Cavalry.

Progress of allotment.

95. Up to the end of September 1902, 44,614 acres had been allotted as follows:—

	Acres.
Peasant colonists (horse-breeding) from Shahpur	15,575
Ditto ditto Gujrát District	21,672
Ditto ditto Gujránwála District	5,637
Kásht báráni tenants from Shahpur	1,730

At present the procedure followed is to get together all the colonists from any one tahsíl and to allow them to sort themselves out. It is noticeable that they very frequently prefer territorial to tribal considerations.

Settlement proceedings.

96. A consolidated rate for land revenue, *málikána* and cesses has been adopted in the colony. This rate varies from Re. 1-8-0 to Re. 0-12-0 according to the class of land. The system of a consolidated land revenue rate will be applied also to the lands in the old villages. The Colonization Officer has been given the power of a Settlement Officer in the old villages commanded by the canal in the Shahpur District, and the revenue work of the villages has been handed over to him. His work here will lie under the following heads:—(*a*) survey on the square system of the old village lands; (*b*) measuring the new cultivation; (*c*) assessing the consolidated land revenue; (*d*) the miscellaneous work of partition, &c. A separate Settlement establishment consisting of a Tahsíldár, two Náib Tahsíldárs and a staff of Kánúngos and Patwáris has been provided for this purpose, and the services of an Extra Assistant Commissioner have been placed at his disposal as Revenue Extra Assistant Commissioner.

General.

97. A grant of Rs. 4,000 has been placed at the disposal of the Colonization Officer in order to meet the expenditure on nurseries, &c. 60 acres were planted with young trees in the spring of 1902, and most of these have matured well. An area of 5 acres is being reserved in the neighbourhood of each village site as a village nursery, from which the village roads will be supplied. Separate nurseries (numbering about 20 in all) were started during the spring of 1903 for the supply of the District Board roads running through the colony. The Financial Commissioner has agreed to the trial, as an experimental measure, of a system by which land shall be given to cultivators on the condition that they plant and maintain a definite length of trees on the main roads. A site was sanctioned for the new Civil Station in the neighbourhood of Sargodha, about 18 miles from Shahpur. The Colonization Officer's Court-house and bungalow are in process of erection, together with a thána and dák bungalow. A number of bungalows intended for the use of Canal Officers have also been commenced, and the station is being connected with Shahpur by a metalled road, the work on which is now in hand. The Railway from Malakwál to Sargodha is now open for traffic. Arrangements for policing of the colony have been made.

CHUNIAN COLONY.

Scheme of Colony.

98. Lands in the Chunián Colony have been granted to zamíndárs of congested villages in the Lahore District. The grantees are all tenants paying revenue and *málikána* with a promise of occupancy rights after five years. Each grantee holds from ⅛rd of a square to a square, a few two-square grants being made to pensioners and the like for special reasons. There is no horse-breeding or other like conditions. The grantees have now enjoyed the remissions allowed for the first years and are paying full rent (revenue and *málikána*). The grantees in the part of the colony to be settled probably in the course of the current year will hold under the same conditions, but the *málikána* is not yet settled. It is hoped that all grantees will qualify for occupancy rights unless the supply of water is so bad in some of the villages that the tenants surrender the land. Records-of-rights have been prepared for all villages in the colony.

Progress of colonisation.

99. 33,457 acres have been allotted, and almost all the area allotted has been brought under the plough. The village sites are laid out in squares. Two broad central roads run through each at right angles, and there are narrower roads parallel with these. For shops and for houses occupied by people other than colonists ground rent is charged. Mud houses and huts have been made by colonists. Most of the colonists have settled permanently in the colony. Those who failed to take up their residence according to the prescribed conditions have been served with notices that, unless they fulfil the condition within three months, they will be ejected. Some have profited by this notice and taken up residence in the colony. Each village has a well; masonry platforms have been built or are being built. Village ponds have been made by building the houses out of them. Trees have been planted by the District Board on some five miles of the road from Pattoki Station. Some of the villagers also have planted trees. *Dharmsálás* and mosques have been built in many of the villages.

Sohag-Para and Sidhnai Colonies.

100. These have now become merged in their respective districts, and no special mention of them is necessary.

Wards' Estates.

Number of estates.

101. As compared with last year, there is a decrease from 50 to 43 in the number of estates administered. The separation of the frontier districts accounts for 5 out of the decrease of 7 shewn; two new estates were taken under control, Kandhola in the Ambala District and Fatehgarh in Gurdáspur while four estates were released during the year. With regard to the Kandhola estate it appears there are debts to the extent of Rs. 13,000 and no balance to meet them. It will probably take five years to clear off these liabilities. The liabilities of the Fatehgarh estate will probably be cleared off in about three years.

General Features.

102. As regards the principal estates under management the following particulars may be noticed:—

Very little progress has been made towards the improvement of the Sher Shah estate. In the main this is due to the length of the negotiations for the loan of 1½ lakhs from the Mamdot estate, which has not yet

been effected. The estate had been mismanaged by the late Makhdúm, and matters since his death have been complicated by doubt as to who will be declared the eventual successor to the *jágír* which is attached to the shrine. The prospects of the Shekhupura estate are improving. The conditions of the Goler estate show no improvement and the local officers dwell upon the difficulties attending the administration, in which they get no assistance from the Rája himself. The estate is hopelessly involved, and the creditors have only been holding their hands in the expectation that a Government loan would be granted for the liquidation of the debts. The Government of India refused to grant this loan in view of the difficulty of binding the Rája's successors, should the present jágírdár die. This difficulty has since been removed by the passing of the Court of Wards Act, but it is probable that a loan will now be obtained from private sources.

Income.

103. Excluding the frontier districts, the gross income last year of all the estates amounted to Rs. 10,93,230; this year it is Rs. 11,15,387. The incomes of the new and the released estates do not much affect the total, and, in view of the agricultural conditions of the past year, the figures are gratifying.

Education of wards.

104. Most of the wards continue to receive education at the Aitchison College.

Revenue and Rent Paying Classes.

Working of Land Alienation Act.

105. The main point of interest at the present time with regard to the position of the revenue paying classes centres in the working of the Land Alienation Act. The normal effect of the Act in so far as transfers of land are in question cannot be gauged with accuracy for some years owing to the abnormal causes at work both before and after it came into force, but the remarkable decrease in the area transferred by mortgage and sale as shown in the land record statistics is undoubtedly due to its operation. The definitions in the Act have worked well, but the statutory agriculturist is a standing danger, because in every village, where any such person is to be found, the door is not closed to permanent transfers by zamíndárs to baniás. There has been a marked decline in the number of usufructuary mortgages and sales of agricultural land; and the decrease in fact is probably much greater than the decrease shown by the statistics, because the figures are the results of the mutation procedure, which lags behind the transactions themselves; and in the preceding year permanent transfers were stimulated by the fears of creditors as to the effect of the Act. The selling price of agricultural land has most likely fallen little; but the figures probably show the effect of baniás' prices inflated by interest, which exaggerated the price of land before the passing of the Act. There is no trace of any sudden and violent depreciation of the value of land. It does not as yet appear that the big tribes are encroaching on the smaller ones; and, in transfers, the zamíndárs as a body have gained more land than they have lost. Credit has, no doubt, been restricted, but with salutary consequences in curbing extravagance on social occasions. The zamíndárs generally approve of the Act, and, for social and other reasons, a good many unprotected tribes are anxious for its protection. The rules and circular orders under the Act have worked very smoothly and well; and there has, contrary to expectation, been no material increase of work. It is not likely that the subordinate revenue officials have as yet become thoroughly familiar with the Act; and their proceedings must be closely watched by Deputy Commissioners. Few devices for the evasion of the Act have so far been detected. Baniás no doubt dislike the Act; and some of the richer men amongst them may be abjuring investments in land and seeking other employment for their capital. It is, however, probable that the small village money-lenders as a class will continue their customary dealings with zamíndárs on a healthier system of credit.

Rent statistics.

106. The tendency for the number of suits for enhancement of rent to decline, which has been noticed of late years, has not been maintained in the year under report, when the number of decided cases rose from 285 to 460. The principal increases have occurred in Rohtak, Gurgaon, Jullundur, Gurdáspur and Jhelum. In Gurgaon the chief cause for the increase appears to be the approaching settlement, while in Jhelum it has been the settlement which has just been concluded. In Jullundur the Deputy Commissioner says there is a tendency for suits of this class to increase in number as many tenants pay very low rents. The tendency for produce rents to take the place of cash rents as a consequence of the introduction of irrigation is noticed in Rohtak. In Kángra a tendency for rents to fall is noticed, but no reasons are assigned. In Gujránwála, where there have been large extensions of irrigation, rents tend to rise, and in some villages the owners have introduced the system of taking a rupee an acre in addition to the ordinary share of the produce. Otherwise there appears to have been no change in the customary shares of produce rents.

Ejectment of non-occupancy tenants.

107. There is an increase in the provincial totals for ejectment proceedings against non-occupancy tenants under all heads except under the head " number of ejectments ordered under Section 45 (5) " where the figures show a slight decrease from 7,544 to 7,204. The districts which show the largest increases are Hissar, Hoshiárpur and Gujrát. As regards Hissar it is noticed that many suits for ejectment are brought to induce tenants to pay a higher rent, and the Deputy Commissioner is of opinion that many of those who are ejected are reinstated on revised terms as to rent. The settlement operations in Sirsa also no doubt tend to send up the figures, owing to landlords being anxious to have the status of their tenants in doubtful cases determined. The same desire to exact higher rents is noted in the case of Hoshiárpur as one of the causes operating to increase the number of ejectment proceedings, and probably this cause is also at work generally in the Province. Another cause, which is also probably of wider application, is referred to by the Deputy Commissioner of Hoshiárpur, and is that landlords endeavour to change their tenants in order to preclude any inconvenient claims hereafter for occupancy rights, though under the law as it stands at present mere lapse of time can never create such a tenure. Another sidelight on the same question is shown also by the Deputy Commissioner of Hoshiárpur where he says that often the ejected tenant is reinstated on his executing a deed acknowledging his status as a tenant-at-will. In Gujrát the increase is said to be largely due to cases of ejectment brought by mortgagees against mortgagors in possession owing to an impression apparently that owing to the effect of the Alienation of Land Act if the mortgagors were allowed to remain in possession the mortgagees' rights would, in process of time, be extinguished. This effect of the Alienation of Land Act in tending to increase ejectment proceedings was noticed in last year's report and possibly still generally continues to operate, as during the year under report the progress made by the generality of the people of the Province towards a more intimate knowledge of the provisions of Act XIII of 1900 appears to have been slow.

Transfers of tenant right.

108. Except in Ferozepore and Ráwalpindi transfers of tenant right appear to be on the decrease. In the two districts above mentioned, where increased activity is noticed, the primary cause appears to be the Alienation of Land Act. In Ferozepore the Deputy Commissioner reports that money-lenders are rapidly acquiring occupancy rights in large areas owing to the transfer of these rights not being subject to the limitations imposed on the transfer of proprietary rights by the Act. The provisions of Section 53 of the Tenancy Act, however, appear to be ample to protect the landlords' rights in such cases. In Ráwalpindi, on the other hand, the increased activity appears to have been due to the Alienation of Land Act not having been extended to the Attock Tahsíl at the beginning of the year and to the mistaken idea of the people that when it did come into operation it would apply to transfers of tenant right.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports:—

Police.—Report on the Police Administration of the Punjab for the year ending 31st December 1902.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1902.

Prisons.—Report on the Administration of the Jails in the Punjab, 1902.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1902.

Registration.—Report on the Administration of the Registration Department of the Punjab for the year 1902.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1902-03.

Local Boards Administration.—Report on the working of Local Boards in the Punjab during the year 1902-03.

And in the following tables of the 1902 Volume of Judicial and Administrative Statistics of British India, *viz.* Police (Tables VII), Criminal Justice (Tables IV), Prisons (Tables V), Civil Justice (Tables III), Registration (Table IX) and Municipal Administration (Tables XVII)].

LEGISLATING AUTHORITY.

109. This subject was treated in last year's Administration Report and it will not be re-written till 1911-12.

Course of Legislation.

Supreme Legislative Council.

110. None of the enactments applicable to British India which were passed by the Supreme Legislative Council during the year especially concerned the Punjab.

Meetings of Punjab Council.

111. The Punjab Legislative Council held its sittings in Lahore during the year under report on the following dates:—

10th November 1902.

24th November 1902.

22nd December 1902.

11th May 1903.

Bills.

112. The following Bills were introduced in Council during the period :—

(1) A Bill to consolidate and amend the law relating to the Court of Wards in the Punjab.

(2) A Bill to make special and temporary provision for the administration of the area occupied by or adjacent to the various Camps at the Coronation Darbár to be held at Delhi.

(3) A Bill to amend the law relating to the limitation of suits for the recovery of money due on account of money lent or advanced, or on an account stated or in respect of goods supplied.

Acts.

113. The Bills that were passed by the Council and which received the assent of the Governor-General during the year are the following :—

	Date when received assent of the Governor-General.
(1) An Act to make special and temporary provision for the administration of the area occupied by or adjacent to the various Camps at the Coronation Darbár to be held at Delhi (Punjab Act III of 1902)	3rd December 1902.
(2) An Act to provide for the periodical enumeration and registration of animals in the Punjab fit, or ordinarily used, for the purposes of transport, and for the compulsory acquisition of such animals in time of war, and for impressment of the same for hire for purposes of military transport at any time (Punjab Act I of 1903)	26th January 1903.

Pending Bills.

114. The Bills that were pending at the close of the year are—

(1) Bill to amend the law relating to pre-emption in the Punjab.

(2) Bill to amend the law relating to the limitation of suits for the recovery of money due on account of money lent or advanced, or on an account stated or in respect of goods supplied.

Members of Punjab Council.

115. At the beginning of the year the following were Members of the Punjab Legislative Council :—

The Hon'ble Mr. (now Sir) Lewis Tupper, K.C.I.E., C.S.I.

" " Mr. J. McC. Douie, I.C.S.

" " Nawáb Sir Imám Bakhsh Khán, K.C.I.E.

" " Mr. J. Wilson, C.S.I.

" " Colonel J. B. Hutchinson.

" " Rái Bahádur Madan Gopál, M.A., Barrister-at-Law.

" " Kanwar Sir Harnám Singh, K.C.I.E.

" " Mr. D. P. Masson, C.I.E.

The changes that took place amongst the Hon'ble Members during the year are the following :—

The seat of the Hon'ble Sir Lewis Tupper became vacant owing to the expiry of his term of office and he was re-appointed for a further term of two years.

The Hon'ble Mr. J. McC. Douie resigned his seat on proceeding on furlough out of India.

The Hon'ble Mr. Alex. Anderson was appointed on the 28th October 1902 to fill a vacancy.

The Hon'ble Colonel J. A. L. Montgomery was appointed on the 27th June 1902, but he resigned his seat on the 28th October 1902 on appointment to the Police Commission.

RULES HAVING THE FORCE OF LAW.

Rules made by Local Government.

116. The following Rules and Regulations having the force of law were issued during the year under report by the Local Government under authority conferred by the various Acts of the Legislature specified :—

Rules under Section 3 of the Hackney Carriages Act, XIV of 1879, for the regulation and control of Hackney Carriages in the Jhelum Municipality and Cantonment and the Delhi Municipality.

Rule under Section 88 (1) of the Punjab Tenancy Act (XVI of 1887).

Regulations under sub-section (1) and sub-clause (*b*) of sub-section (2) of the Epidemic Diseases Act, 1897.

Rules under clause (*c*) of Section 75 of the Indian Forest Act, 1878, for the preservation, reproduction and disposal of trees and timber within forest lands in the Murree and Kahúta Tahsíls of the Ráwalpindi District.

Rules under Section 60, clauses (*j*) and (*k*), of the Prisons Act, IX of 1894.

Rule under Section 41 of the Indian Forest Act, VII of 1878.

Rules under Section 26 of the Punjab District Boards Act, 1883, as rules of business of the Miánwáli District Board.

Rules under Section 184 (1) (*g*) of Municipal Act for the appointment of members of the Municipal Committee of Lahore.

Police.

Sanctioned strength.

117. The sanctioned strength of all bodies of Police organized under Act V of 1861, during 1902, was as follows :—

Inspector-General of Police	1
Deputy Inspectors-General of Police	2
District Superintendents of Police (including Assistant Inspector-General of Railway Police)	31
Assistant District Superintendents (including Deputy Superintendent of Railway Police)	27
Inspectors	67
Deputy Inspectors and Platform Sergeants	582
Sergeants	2,415
Constables including 195 Mounted Constables and 128 Town Watchmen	15,125

Increase of Staff.

118. The additions to the Force in 1902, which are included in the above figures, *viz.*—

9 Deputy Inspectors,

2 Platform Sergeants,

33 Sergeants,

214 Constables,

were in connection with an increase to the strength of the Jhang, Shahpur and Railway Police.

Nationality and religion of Police.

119. The nationality of the Force on the 1st January 1903 was:—Europeans 85, Eurasians 13, Natives 17,942. Classified according to religions, there were—

Religions.	Officers.	Men.
Christians	102	4
Muhammadans	1,673	9,567
Sikhs	365	1,466
Hindús (Brahmans, Rájpúts and Gurkhas)	365	2,003
Hindús of all other castes	574	1,921
Total	3,079	14,961

Cost of Force.

120. The estimated cost of the Force was Rs. 35,00,559, of which Rs. 28,77,846 was debitable against Imperial or Provincial Revenues, and the balance against Municipal, Cantonment and other funds.

Classification of cases investigated.

121. During the year 1902, 50,501 cases were reported to the Police. Of this number 618 were not investigated as they were held to be untrue. 37 cases were investigated under Magistrate's order after investigation had been at first refused. Considered according to classes, the following results are obtained:—

Class.	Offences.	1901.	1902.
I	Offences against the State, public tranquility, safety and justice.	746	840
II	Serious offences against the person	4,069	4,476
III	Serious offences against the person or property or against property only.	11,032	12,875
IV	Minor offences against the person	126	142
V	Minor offences against property	14,223	14,560
	Total of Classes I to V	30,196	32,893
VI	Other offences	16,397	17,608
	GRAND TOTAL	46,593	50,501

122. The following figures show the efficacy of the Police working during the past four years in regard to offences included is Classes I to V :— Working of Police.

1	2	3	4	5	6	7	8
YEAR.	Investigated cases regarded by the Police as true.	Cases in which investigation failed.	Completed trials of investigated cases.	Investigated cases declared by Courts false, mistaken or non-cognizable.	Trials ending in acquittal or discharge.	Trials ending in conviction.	Percentage of convictions to trials.
1899	34,756	15,626	17,676	1,189	4,329	12,158	68
1900	38,211	16,196	20,946	1,225	4,616	15,105	72
1901	26,154	11,479	13,792	896	3,190	9,706	70
1902	28,015	12,924	14,168	999	3,402	9,767	69

123. The armament of the Force was as follows :— Equipment.

Men armed with	Fire-arms	7,963
	Swords and Batons	10,428

124. The subjoined figures show the number of departmental and judicial punishments inflicted on the Force during the last three years :— Discipline.

	1900.	1901.	1902.
Departmental punishments (excluding dismissals)	1,884	1,425	1,578
Judicial punishments	158	101	109
Total	2,042	1,526	1,687

125. 2,515 officers including Sergeants and 3,339 Constables can read and write. Education.

126. 8 punitive posts which were in existence at the close of 1901 were continued for further periods, and 13 new posts were established during the year. The punitive police post located at Asal Autar in the Lahore District was rendered necessary by the misconduct of the inhabitants who attacked the officer in charge of the Waltoha Police Station when he attempted to seize some stolen cattle traced to the village. The four posts in the Siálkot District were established in consequence of the recklessness displayed by the people during outbreaks of plague. Punitive Police Posts.

General.

127. The work of the Criminal Identification Bureau at Phillour is increasing and the percentage of criminals traced by thumb marks has risen since last year. The Native States of Nábha, Jínd and Baháwalpur are introducing the system in their territory. The relations between the British Police and the Police of Native States have been very cordial and satisfactory. The Police arrangements at the Darbár were excellent.

RURAL POLICE.

Village Chaukidars.

128. The position of the Village Chaukídárs was explained in last year's report. They are not under the Police, but under the Collector as the head Revenue authority. Their work during the year has not been noticed either in the Land Revenue Report or in the Police Report and there is nothing to add to what was said last year.

CRIMINAL TRIBES.

Tribes subject to the Act.

129. The tribes subject to Act XXVII of 1871 are the Mínás, Tágus, Bilúchís, Harnís, Sánsís, Bauriahs, Pakhiwárs, Mahtams, Bhats and Giloi Biluchís.

Minas.

130. The number of Mínás on the register of the Gurgaon District was 403 against 374 last year, of whom 69 were absent without leave on the 31st December 1902. In all 16 members of the tribe were convicted—4 under the Indian Penal Code and 11 under the Criminal Tribes Act.

Tagus.

131. The number of names on the register of the Karnál District at the close of the year was 244 against 228 last year. 18 registered members of the tribe were convicted during the year, *viz.* 16 under the Criminal Tribes Act and 2 under the Indian Penal Code. 48 members were shown as absent without leave at the close of the year.

Biluchis.

132. In the Karnál District 47 convictions were obtained against members of this tribe under the Criminal Tribes Act. Two were required to furnish security under Section 110, Criminal Procedure Code, one was convicted under the Arms Act and one under Section 457, Indian Penal Code. On the 31st December 1902, 452 names were on the Karnál register against 403 last year, and 17 on that of Ambala. From the former district 107 were absent without leave and from the latter only one, the same as last year.

Harnis.

133. The following table shows the districts in which this tribe is registered and the operations under the Act:—

District.	Number of persons on the register.		Offences committed in 1902.		Number of persons absent without leave.
	End of 1901.	*End of* 1902.			
	Males.	Males.	Under Criminal Tribes Act.	Under other laws.	
Ludhiána	892	912	82	6	134
Jullundur	52	51	6	...	4
Hoshiárpur	225	230	15	...	13

134. The following table gives an abstract of the operations of the Act in the districts in which this tribe is registered :— Sansis.

District.	Number of persons on the register.		Offences committed in 1902.		
	End of 1901.	*End of* 1902.			
	Males.	Males.	Under Criminal Tribes Act.	Under other laws.	Number of persons absent without leave.
Karnál	84	155	1	3	28
Ludhiána	344	343	6	9	12
Jullundur	275	273	12	5	2
Hoshiárpur	85	87	15	...	1
Ferozepore	36	49	...	10	...
Lahore	70	69	8	5	1
Gurdáspur	532	1,005	33	16	24
Siálkot	417	820	12	10	176
Gujránwála	1,190	1,267	20	5	38
Jhelum	...	4	...	...	...

135. In the Ludhiána District 3 convictions were obtained against members of this tribe under the Criminal Tribes Act. There were 113 persons on the register at the close of the year against 117 last year, and 17 were absent without leave. This tribe is also registered in the Ferozepore District, where 29 Bauriahs, including 2 previously exempted persons, were convicted under the Indian Penal Code, 49 under the Criminal Tribes Act and 2 under other laws. There 2,755 persons on the register at the close of the year, out of which number 341 were absent without leave. Bauriahs.

136. The number of Pahkíwárs on the register of the Siálkot District at the close of the year was 885 against 319 last year. 32 offences under the Criminal Tribes Act and 4 under other laws were committed during the year. 116 members of this tribe were reported to be absent without leave at the close of the year. Pakhiwars.

137. The number of Mahtams on the register in the Lahore District at the close of the year was 45 against 46 in the previous year. Two members were absent without leave on the 31st December 1902. Two members of this tribe were convicted under the Criminal Tribes Act and 8 under the Indian Penal Code. Mahtams.

138. 167 men of the tribe of the Siálkot District were on the register at the end of the year against 208 last year. 8 persons were convicted under the provisions of the Act and 2 under the Indian Penal Code. There were 25 members absent without leave at the close of the year. Bhats.

139. The number of names on the register of the Jhang District on the 31st December 1902 was 105 against 76 last year of whom only one person was absent without leave. Three convictions were obtained under the provisions of the Act. Giloi Biluchis.

Criminal Justice.

140. The general state of crime in 1902 appears on the whole to have been worse than in 1901, though there was a decrease in murders. General review of offences committed and brought to trial.

141. The number of offences reported during the year was 169,944, of which 116,515 were returned as true. This works out to 5 offences returned as true for every thousand of the population, the same proportion having been

recorded in 1901. 99,059 cases, involving 228,581 persons, were brought to trial. This shows an increase of 7,252 cases, and 20,810 persons brought to trial, over the figures for last year. 31 per cent. of the cases brought to trial were dismissed *in limine*, showing an increase of 1 per cent. on last year's figures, while, on the other hand, the percentage of convictions has decreased from 33 in 1900 and 28 in 1902 to 27 in the year now under review. The highest district percentages are 65 (Simla), 50 (Dera Gházi Khan) and 42 (Miánwáli), and the lowest 16 (Hoshiárpur and Siálkot) and 23 (Gurdáspur).

Offences classified.

142. 70 per cent. (or 82,235) of offences returned as true were under the Indian Penal Code. The percentage of convictions in cases brought to trial under the Code was 24, the same figure as in 1901. Of offences returned as true, there is a satisfactory decrease in those affecting life from 889, the figure of 1901, to 821 in 1902; of these 389 were murders as against 410 last year and 690 in the year 1900.

Local and Special Laws.

143. 34,280 cases were admitted and 36,209 persons convicted. Under the Arms Act 308 offences were admitted and 241 persons convicted. In 1901 the figures were 343 and 284, respectively, and in 1900 787 cases were admitted and 555 persons convicted under this Act.

Security for good behaviour (Sections 107 and 110, Criminal Procedure Code).

144. These sections are of great importance in this Province and the Punjab accounts for a quarter of the total proceedings taken in the whole of India under them. 4,796 persons were called upon to give security for good behaviour during the year as against 4,030 in the previous year. 190 persons were released upon probation under Section 562 of the Criminal Procedure Code, and of this number 76 were subsequently dealt with under Section 563. The figures for 1901 were 216 and 26, respectively. The section might be more freely used.

Agency by which criminal work was disposed of.

145. District Magistrates, including Additional District Magistrates, disposed of 2,565 cases as against 2,361 last year. They tried 59 European British subjects, of whom 29 were convicted, 27 acquitted, and 3 were awaiting trial at the close of the year. Honorary Magistrates have done well. Disposals in Sessions trials amounted to 384, last year's figure being 385. The largest increase was in Lahore (from 27 to 53).

Punishments.

146. The Chief Court confirmed the sentence of death upon 70 persons commuted it in the case of 26, and acquitted 20 persons sent up under Section 374, Criminal Procedure Code, as compared with 102, 13 and 20 persons, respectively, in the year 1901. The number of persons sentenced to solitary confinement rose from 7,931 in 1901 to 8,204, and the number of persons whipped fell from 2,560 to 2,228. The figure in 1900 was 4,642. Forfeiture of property was ordered in 4 cases only as against 24 in 1901, and 139 in 1900.

Appeal and Revision.

147. Of 63,855 persons convicted, 18,083, or 28 per cent. appealed, 9,689 to the District Magistrate, 7,567 to the Sessions Judge and 827 to the Chief Court. Twenty per cent. of these appeals were summarily dismissed, 43 per cent. dismissed after notice, and in the case of the remaining 37 per cent. the sentences were reduced, altered or set aside, or the proceedings quashed.

The Chief Court.

148. During the year not a single case came before the Chief Court in the exercise of its original jurisdiction. This is an excellent testimonial to the abstention of the large European population of the province from serious forms of crime. The number of appeals instituted fell from 797 to 610, disposals from 855 to 632, and the pending file from 163 to 141. Revisions rose from 1,606 to 1,660, disposals from 1,404 to 1,449, while the pending file rose from 202 to 211.

Prisons.

Number of jails.

149. There was no change in the number and constitution of the jails and larger judicial lock-ups in the Punjáb during the year. The jail at Dera Gházi Khan was, however, closed between the 3rd July and 2nd October, as its site was threatened by the erosion of the Indus.

Jail population.

150. The total number of convicts under confinement on the 1st of January 1902 was 12,423, as compared with 13,467 and 12,107 on the same date in 1901 and 1900 respectively, while the number of prisoners under trial was 1,008, which was only slightly more than in 1901 and 637 less than in 1900. The number of under-trial prisoners admitted in 1902 (18,830) was less by 237 and 5,633 than in 1901 and 1900, respectively, but the number of convicts admitted (21,263) was 3,448 more than in 1901 and only 1,487 less than in 1900. This is accounted for by the fact that more than the usual number of convicts was received from judicial lock-ups. In spite of the increase in the number of convicts admitted, the average population of the jails and lock-ups (convicts 12,005 and under-trials 1,100) was less in 1902 than in the preceding year, which was due to the smaller number of convicts in jail at the beginning of the year than in 1901 and to the large number of convicts sentenced in 1902 to short terms of imprisonment.

Accommodation in jails.

151. Excluding the accommodation in hospitals and observation cells, which is sufficient for 1,115 prisoners, there is accommodation in the jails for 12,767 convicts and 716 under-trials. There was sufficient accommodation for the average number of prisoners under confinement in 1902, but the margin available for an increase of prisoners is not great. The only jails in which the total average population for 1902 exceeded the accommodation were the Central Jails at Montgomery and Mooltan ; in these, as well as in others during periods when there was temporary overcrowding, the surplus prisoners were accommodated in tents.

Buildings.

152. The expenditure on buildings by the Public Works Department amounted to Rs. 1,01,672, including an outlay of Rs. 40,453 on repairs. New jails on the cellular system are being built at Miánwáli and Lyallpur ; these, with the new central jail to be built in the southern part of the Province, and a new jail at Dharmsála, will provide the extra accommodation which is needed. The original works put in hand during the year comprised the following :—Cubicles according to the approved design for 185 prisoners ; increasing the lateral ventilation of the dormitories and cells in the three Lahore Jails, and also in the Ráwalpindi, Jhelum and Hissar Jails ; enclosing the workshops in the Mooltan Central Jail ; extending the municipal water-supply at Delhi to the jail there ; improving the bathing and conservancy arrangements in several jails ; and constructing more quarters for upper subordinates and married Warders at the Montgomery Central, Ráwalpindi and Jullundur Jails.

Classification of convicts.

153. 18,994 male and 594 female convicts were admitted into jail during the year. Of these, 51 were Christians (European 1, Eurasians 9 and Native Christians 41), 12,889 Muhammadans and 6,648 Hindús, the ratio per *mille* of each denomination of the free population being—Christians 0·77, Muhammadans 1·19, and Hindús and Sikhs 0·71.

The imprisonment of 116 boys and 12 girls under 16 years of age and of a large number of others to whom less than six months' imprisonment was awarded in 1902 appears to show the necessity for the Reformatory which has for some time past been under establishment and will very shortly be opened. Juveniles and juvenile adults are, it is true, specially treated in jails, and are kept separate from other prisoners, especially where cubicles are available. But a jail is not calculated to improve juveniles or casual offenders with no strong criminal propensities. The experience of the Lahore Central Jail in

the treatment of juveniles indicates that the use of the Reformatory will prove beneficial and will enable Magistrates to deal with youthful offenders satisfactorily.

Remarks regarding sentences.

154. Of the 19,588 convicts admitted into jail, 2,480 were sentenced to simple imprisonment, 9,318 to rigorous imprisonment, 7,452 to rigorous imprisonment with solitary confinement, and 338 to rigorous imprisonment with whipping. Of those shown as sentenced to rigorous imprisonment, only 98 (89 males and 9 females) were admitted under sentence of transportation for life, 62 under sentence of transportation for a term, and 94 (84 males and 10 females) under sentence of death. 199 males and 12 females were transported beyond seas in 1902 against 179 males and 11 females in 1901, and 63 (65 males, 3 females) were executed during the year against 94 (93 males, 1 female) in 1901. 10,818 convicts, or 55 per cent., were awarded sentences of 6 months or less (one month or under 21·9 per cent. from one to three months 15·7 per cent., and from three to six months 17·7 per cent.). The number sentenced to terms of imprisonment exceeding five years was 279, or 1·4 per cent., while 160, or ·8 per cent., were sentenced to transportation. 12·4 per cent. of the total number of convicts admitted were habituals. The extension of cellular accommodation is enabling the jail authorities to deal with habitual criminals more effectively than was possible in the past, while the system of their police surveillance after release is being improved.

Escape and recaptures.

155. The number of escapes decreased from 16 in 1901 to 8 in 1902. 4 convicts escaped from within jail walls and a similar number from without. 6 of the 8 who escaped during the year were recaptured, and 3 of those who escaped in the previous 10 years were also recaptured, leaving 28 still at large. The escapes were due to negligence and connivance on the part of individuals, who have been suitably punished.

Imposition of fetters.

156. 4,085 convicts (as compared with 4,187 in 1901) were fettered for safe custody during 1902. This form of restraint was resorted to somewhat freely in some jails where prisoners were placed in quarantine camps outside the walls, and in others where extensive building operations were in progress.

Discipline, offences and punishments.

157. In 1902, 38,675 prison offences were recorded against 38,074 in 1901; the percentage of offences to daily average population, which was 301 in 1901, rose to 325 in 1902, the rise being ascribable to insistence on the maintenance of stricter discipline. On the other hand, serious offences committed by prisoners have declined. The number of offences relating to work rose from 23,927 in 1901 to 24,518, and the number of offences relating to prohibited articles from 3,376 to 3,482. The total number of minor punishments declined from 27,513 in 1901 to 27,122 in 1902, while the total number of major punishments rose from 10,452 to 11,514: the number of punishments under "penal diet with solitary confinement," "corporal punishment," and "combination of punishments," however, decreased by 16, 65 and 10 respectively. Corporal punishment was not once used in 13 jails, including those at Mung Rasúl and Ráwalpindi.

Education.

158. Of the 19,588 convicts admitted during the year, only 364 (all males) possessed any literary attainments.

Mark System.

159. 4,032 prisoners were released during the year under the mark system as compared with 4,295 in 1901. The longest remission—768 days—was earned by a convict under a term exceeding 10 years who was released from the Lahore Central Jail. The largest gratuity—Rs. 6-14-0—was earned by a convict released from the Montgomery Central Jail. The average gratuity earned was Re. 1. The operation of the mark system was extended during the year by the award of special marks up to 360 being authorized in the case of

prisoners, otherwise eligible under the system, who for the period of one year immediately preceding the grant of the marks had committed no prison offence. This extension promises to prove a valuable additional incentive to good conduct and industry.

Employment of convicts.

160. The average number of convicts sentenced to labour on working days in 1902 was 11,772 as against 12,507 in 1901, while there was an increase of 33 in the average number not employed for other reasons. The average number employed on building operations was 198 as against 150 in 1901, the increase being ascribable to more work being undertaken during the year. The average number employed on manufactures declined from 3,850 in 1901 to 3,646, but the percentage was the same in both years, *viz.* 31. The decrease of 357 in the average number employed on public works is due to the prevalence of cerebro-spinal fever having put a stop to the transfer of prisoners to the Mung Rasúl Central Jail during the early months of the year, and to the population having been purposely allowed to fall towards the close of the year, in view of the completion early in 1903 of the work on which the prisoners were employed.

Convict Officers.

161. An average of 987 males and 11 females were employed as convict officers, being equal, as in 1901, to a ratio per cent. of 8 and 4, respectively, of the daily average population. The number of punishments awarded to convict officers was 1,188 as against 993 in 1901. Kept in strict discipline, convict officers form an indispensable adjunct to the management of jails under existing conditions.

Manufactures.

162. The net cash earnings of convicts amounted to Rs. 1,19,573 as against Rs. 1,24,834 in 1901. The reasons for the fall were the demand for labour by the Public Works Department, sickness in certain jails, and the disorganization of the Dera Gházi Khan Jail industries, through the removal of the prisoners as a precautionary measure, in view of the flooding by the Indus, which was feared. These causes were unavoidable, and the amount earned is, under the circumstances, satisfactory, especially as the average earnings per head of the number employed on manufactures and of the number sentenced to labour were Rs. 26-7-0 and Rs. 10-2-0, respectively, as compared with Rs. 24-9-0 and Rs. 10-0-0, respectively, in 1901. Industries were managed in a capable manner in the Lahore Central, Montgomery Central, and Ambala and Delhi District Jails. The largest cash profits were yielded by—extra-mural employment, Rs. 23,873; paper-making, Rs. 35,696; lithographic printing, Rs. 20,723; weaving woollen articles, Rs. 8,183; mat-making, Rs. 4,192; oil-pressing, Rs. 3,623; uniforms, etc., for warders, Rs. 3,513; weaving cotton fabrics, Rs. 4,901; and pottery, Rs. 645. The amount realized by the extra-mural employment of prisoners was Rs. 39,134 less than what it was in 1901, the decrease being mainly due to the prevalence of cerebro-spinal fever having put a stop to transfers to the Mung Rasúl Central Jail during a portion of the year, and to the labour tasks of the prisoners having been reduced as already explained. The *indirect* profit resulting to Government from the employment of convicts on jail duties amounted to Rs. 2,78,334 as compared with Rs. 2,91,959 in 1901.

Total Expenditure.

163. The total cost of guarding and maintaining prisoners during the year was Rs. 8,45,657, or Rs. 66-5-7 per head, the chief items in the latter being Rs. 25-9-8 per head for establishment charges and Rs. 22-9-9 for dieting. The total expenditure shows a decrease of Rs. 14,392 on that for 1901, on account of the smaller daily average number of prisoners confined in the year; but the average cost per head increased from Rs. 64-1-7 in 1901, the increase being mainly under the head establishment, pay for 13 months having been disbursed in 1903 Vegetables and other produce to the value of Rs. 49,701 were supplied from jail gardens and farms for the consumption of prisoners. Deducting the earnings of the prisoners, the average net cost per head was Rs. 57-0-0 as against Rs. 54-13-0 in 1901. Under the circumstances this is not unsatisfactory and compares favourably with the average for the last three years.

Health.

164. The health of the prisoners was satisfactory. The hospital admission-rate of all classes of prisoners fell from 1,253 per *mille* in 1901 to 1,137, and the ratio of constantly sick declined from 38 to 35 per 1,000; and though the

death-rate of the free population was higher in 1902 than in 1901, the prison death-rate fell to 25·06 per *mille*. Of the 19,876 prisoners discharged from jails during the year 51·5 per cent. had gained in weight, 33·5 per cent. had neither gained nor lost, and only 15 per cent. had lost in weight. Except for cerebro-spinal fever and plague there was no epidemic disease in the jails. In spite of the wide extension of plague throughout the Punjab, only 3 deaths occurred from the disease in jails. Plague was effectually stamped out in Ludhiána Jail by evacuation. The cerebro-spinal fever did not originate in the jails, but was imported from outside. Its effects were felt chiefly in the Hissar, Delhi and Mung Rasúl jails; only 39 deaths were due to it, and the measures taken to suppress it were effective. There was a decrease in the hospital admission-rate for malaria, and the Inspector-General of Prisons is able again to report favourably on the value of quinine prophylaxis. Steps are being taken to prevent the spread of tubercle of the lungs among the prisoners by the provision of special isolation wards for tuberculous prisoners, and by improving the ventilation of dormitories and workshops. A great deal has already been done in this direction, and it is hoped that the danger that threatens will be averted by the measures being taken.

Magisterial Lock-ups.

165. The daily average number of prisoners in the larger Magisterial lock-ups was 395 (convicts 77, under-trials 316, and civil 2). Three deaths occurred, giving a death-rate of 7·59 per *mille* of average strength as against 15·67 per *mille* in 1901. Three under-trial prisoners escaped,—two from the Lahore Lock-up and one from the Bhakkar Lock-up. The total average cost per head on guarding, maintenance, etc., was Rs. 94-10-9 against Rs. 99-6-4 in 1901.

General Remarks.

166. The Inspector-General of Prisons visited every jail once, and to some he paid several visits, during the year. There was an improvement in the visitation of the jails by official visitors.

Civil Justice.

Institutions.

167. There was a satisfactory decrease of 12,645 in the number of suits instituted in Civil Courts during the year. The following districts show the largest decrease:—

	Cases.
Hissar by	3,833
Rohtak by	2,144
Gurgaon by	1,814
Karnál by	1,226
Lahore by	1,016
Ferozepore by	1,008

These figures show how intimately indulgence in litigation is connected with agricultural prosperity. The year 1902 was, as compared with its predecessor, a year of scarcity in the Eastern Punjab, and the failure of the rabi harvest was unquestionably the cause of the decrease in the number of suits instituted in the districts named. No district shows an increase of over 1,000 institutions. Jhang heads the list with 904, and Jhelum comes next with 572. In both these districts the harvests were good. In the Province, as a whole, the number of suits for foreclosure fell from 7,028 to 6,158. The figure for 1900 was 9,857. Similarly, the number of notices to enforce conditional sale in the year under review was only 1,334 as against 2,472 in 1901 and 4,099 in 1900. This steady decrease is clearly due to the passing of Act XIII of 1900. A certain proportion of the notices issued in 1902 may have referred to house property or to land other than agricultural land.

Classification of suits.

168. The total number of suits brought by money-lenders against agriculturists fell from 105,958 to 100,449. Suits to establish a right to pre-emption fell from 5,528 in 1901 to 3,537 in the year under review. As the majority of these suits relate to agricultural land, the decrease is obviously due to the restrictions placed on the alienation of such land by Act XIII of 1900. Practically every district in the Province shows a decrease, the most noticeable being Siálkot,

Hissar, Mooltan, Jhelum, Gujrát and Ráwalpindi. The only districts that show a slight increase are Ambala and Kángra. There was a slight increase in suits connected with matrimonial claims from 1,896 in 1901 to 2,092 in 1902.

Value of suits.

169. The total value of suits fell from Rs. 3,74,73,291 in 1901 to Rs. 2,39,32,813 in 1902, and the average value from Rs. 161-13-6 to Rs. 109-6-1. The figures for last year were, however, misleading, as they included a single suit in Ráwalpindi, the value of which was estimated at nearly 1½ crores of rupees. Its real value appears, from a remark of the Divisional Judge in this year's report, to have been between 4 and 5 crores. The number of suits for trifling sums continues to be deplorably large.

Disposals in courts subordinate to the Chief Court.

170. 5 original suits came before Divisional Courts, and all of them were decided. Out of 265,771 suits for disposal in District Courts, 236,016 were decided, 29,755 being left pending. As compared with 1901, disposals fell by 6,502, and the pending file by 899. On an average each District Judge and Subordinate District Judge with appellate powers decided 132 cases, each Assistant Commissioner 90 cases, each Extra Assistant Commissioner 137 cases, each Tahsíldár 140 cases, each Náib Tahsíldár 225 cases, each Munsif 1,722 cases, each Judge of a Provincial Small Cause Court 1,885 cases, each Munsif with Small Cause Court powers 1,369 cases, each Judge of a Cantonment Small Cause Court 391 cases, and each Honorary Civil Judge 194 cases. The increase in the average outturn of Assistant Commissioners, noticed in last year's report, has been steadily maintained. Each Náib Tahsíldár did nearly three times as much civil work as in 1901. One Munsif in Miánwáli disposed of no less than 3,342 cases.

Duration of cases.

171. The average duration of contested cases was 45 days and of uncontested 27 days, as compared with 47 and 28 days, respectively, in 1901. The average duration of contested cases was noticeably high in Mooltan (60 days), Hissar (63 days) and Jhang (63 days).

Commissions.

172. The figures for commissions issued under Sections 392 and 394 of the Civil Procedure Code again call for some remark. Considerable increases are recorded in Delhi (from 64 to 122), Gurdáspur (from 65 to 117), and Dera Gházi Khan (from 67 to 113). On the other hand, the following districts show a large decrease:—Ambala (from 157 to 92), Simla (from 27 to 1), and Ferozépore (from 317 to 85). No explanations are offered in the case of Ambala and Simla.

Arbitration.

173. The total number of cases referred to arbitration was 1,300, or 20 more than in 1901. No districts show any remarkable fluctuations in their returns.

Execution of decrees.

174. The results recorded during the year 1902 are no better than those of 1901. In the year under review there were in all 225,823 applications for execution of decrees, of which 195,103 were disposed of. The number of applications was about 5,000 less than in 1901, but the number of disposals fell by nearly 7,000. Rupees 6,36,763 were realised voluntarily and Rs. 29,88,866 after issue of process. This represents a realisation of about 22 per cent. on the value of money decrees in execution; the same percentage was recorded in 1901. The percentage is low in districts of Delhi (13), Hissar (16), and in Montgomery and Muzaffargarh (17), and high in Gurdáspur (31), Dera Gházi Khan (32), Jhang (33) and Amritsar (39). But it must be remembered, firstly, that a large number of money suits are brought simply to save limitation, in the confident hope that a settlement will be arrived at with the debtor outside the court; secondly, that a large number of money decrees are passed against debtors who have nothing to pay with except the annual profits from their land, and that their creditors do not expect to get more than this; and, thirdly, that many payments are made which are never communicated to the Courts concerned. The Hon'ble Judges have issued a general letter to all Divisional and District Judges asking them to pay special attention to the work of execution of decrees in subordinate courts, and proposals for a general increase of pay to bailiffs and other subordinates of the executing agency are under consideration. It is to be hoped that in future this branch of judicial work will improve.

Appeals in Courts under the Chief Court.

175. The percentage of appeals to appealable orders fell from 24 to 22. 6,897 appeals were instituted in Divisional Courts, being 1,070 more than in 1901. In spite of this large increase, the pending file rose only from 1,905 to 2,419. In 57 per cent. of the appeals the order of the lower court was upheld. The Divisions in which appellate work was heaviest were Hoshiárpur (834), Delhi (797), Jhelum (721) and Siálkot (682). The figures quoted are those of disposals. The average duration of appeals rose from 93 to 103 days. An Additional Divisional Judge was appointed to Jhelum for 1 month, to Siálkot for 2 months and 23 days, and to Mooltan for 4 months and 13 days. In District Courts 6,164 appeals were instituted as against 6,201 in 1901. The order of the lower Court was upheld in 56·3 per cent. of appeals. The pending file fell from 813 to 802, and the average duration rose from 38 to 45 days. The figures under this head are in all cases practically identical with those of 1901.

Chief Court.

176. 4 original suits, 719 appeals from decrees, and 259 appeals from orders were instituted in the Chief Court during the year. In 40 per cent. of the appeals the decision of the lower court was affirmed. These figures differ only very slightly from those of 1901. The number of appeals from decrees has, however, fallen by 65, but the number of disposals has also fallen. Consequently the reduction in the pending file (by 217 cases) noticed in the report for 1901 has not continued during the year now under review. The number of cases pending at the end of the year was 1,529, or 1 more than at the end of 1901. The diminution in the number of disposals is ascribed to the fact that single Benches decided only 382 appeals, or 311 less than in the previous year, as throughout the year the Judges of the Second Bench sat continuously as a Division Bench and not at all as two single Benches. In spite of the diminished number of disposals, the pending file of single Bench cases has only risen from 366 to 411. The number of appeals that could be disposed of by single Judges was less than formerly. Owing to the recent amendment of the Punjab Courts Act reducing the power of appeal, the Chief Court did not receive the same number of petty cases capable of rapid disposal, which naturally tended to swell the statistics of former years. The Hon'ble Judges have, however, recently modified the rules passed under Section 8 (1) of the Punjab Courts Act, and have considerably extended the civil appellate jurisdiction of single Benches. They hope that this reform may have the effect of slightly expediting the disposals of civil appeals generally, and that it may result in a reduction of the large file of pending cases. First appeals from decrees are the heaviest class of work before the Court, and 101 of them were disposed of as against 38 in 1901. Institutions increased from 81 to 90. Division Bench appeals are the next heaviest class of work, and 383 of them were disposed of as against 320 in 1901. Thus, though the figures show only 997 appeals disposed of as against 1,266 in 1901, the actual work done is probably quite equal to that done in 1901.

Increase of staff.

177. Separate District Judges were appointed in September 1902 for Karnál, Gujrát, Shahpur, Muzaffargarh, Jhang and Miánwáli. In addition there are now in Jhang and Gujránwála Extra Assistant Commissioners solely employed on civil work, and further suggestions for the separation of civil and criminal work in various districts have lately been submitted to Government.

Registration.

Change in period of Report.

178. The last triennial report was for the years 1899-1900, 1900-01, 1901-02. As the calendar year has now been adopted for purposes of registration reports, the next triennial report for 1902—1903—1904 will be due in 1904.

General results.

179. It was noticed in last year's Administration Report that there had been a very great decline in Registration business owing to the introduction of the Punjab Alienation of Land Act. There is a further decline observable in the statistics of business for 1902; this drop in business, however, is chiefly noticeable in the first half-year. The second half of the year shows some signs of a revival.

Details of the year's business.

180. The number of documents registered has fallen by 4,160. Registrations of immovable property have fallen by 4,258. Sales are less by 2,472. (This may be explained by the fact that in the first five months of 1901 before the Alienation Act became law there was a great rush to get sales effected.) The number of mortgages are less by 2,158 and they have fallen in value by Rs. 18,79,245. The total value of all property affected by registered documents is about 364 lakhs, which is 7 lakhs more than last year. Of this 347 lakhs refer to immovable property, the rest to movable property. This increase is due to three facts:—

(*a*) Though (as mentioned above) the number of sales is less than last year the value involved is Rs. 2,29,627 greater.

(*b*) In Delhi there were optionally registered leases involving the unusual value of Rs. 1,84,193.

(*c*) In Delhi, Amritsar and Lahore there were unclassified deeds involving rather unusually large values.

Receipts.

181. The total of ordinary fees (Rs. 1,39,895) is less by Rs. 6,321 and the total of other receipts including copying fees (Rs. 61,779) is less by Rs. 4,351 and the grand total (Rs. 2,01,674) is less by Rs. 10,672. Applications for "copies," "inspections" and "searches" are less by 1,349, and the receipts under these three heads fell from Rs. 54,631 to Rs. 50,628. The proportion of fees taken in respect of registrations of immovable and movable property (Rs. 1,31,025 and Rs. 5,600 respectively) is about the same proportion as last year.

Expenditure.

182. The total expenditure is less by Rs. 603. There was some saving in "percentage paid to Registering Officers" and also by reduction of establishment, but there was an increase in other items of expenditure.

Miscellaneous.

183. The reductions of establishment ordered in the Government Review of last year's Report did not, most of them, take effect till the end of the year under report. The organisation of the centralised record system, the reduction of establishment in proportion to the decrease in registration business, and the scheme for fixing in a suitable fashion the remuneration of non-official Registrars are receiving continued attention.

Local Boards Administration.

Constitution of District Boards.

184. The number of District and Local Boards remained the same as in the previous year. Local Boards now exist in 7 districts only.

Elections.

185. Elections were held in 12 out of the 17 districts in which the elective system is in force, but only 38 out of 264 vacant seats were contested. In Gurgaon, where 31 vacancies occurred, no contest took place. The elective system, it is said, is not appreciated by the people and candidates are secured with great difficulty. In Karnál some interest was displayed, 21 candidates contesting for 3 vacancies in the Pánipat Tahsíl. But as a rule the elections were characterized by the usual apathy.

Meetings of District and Local Boards.

186. With few exceptions the prescribed number of meetings were held by District Boards, and the attendance was on the whole satisfactory. Local Boards in many cases did not meet as often as they are required by rule to do, but this was generally due to there being no business for them to transact.

Finance Sub-Committees now exist in all districts, and their work is generally well reported on. In Hoshiárpur there are Sub-Committees for Education and Sanitation which are said to work in a satisfactory manner. In Kángra the "Works" Sub-Committee is reported to have proved itself a useful body and to have rendered appreciable help. In Miánwáli the duties of the District Board have been divided amongst its members by the appointment of 7 Sub-Committees.

Proceedings set aside.

187. The Commissioner of Delhi overruled a resolution of the District Board of Rohtak whereby the purchase of an annuity of Rs. 9-8-0 was proposed for a retired Muharrir, the expenditure involved being more than the Municipal Funds could afford. A gratuity of Rs. 180 was subsequently sanctioned for the Muharrir. The Commissioner of Lahore directed the District Board of Gujránwála to postpone action for a year on a resolution sanctioning the entertainment of a Gymnastic Master at Rs. 15 per mensem and the grant of a small increase in the pay of 4 District Board Muharrirs working at the head-quarters of the tahsíls. A resolution of the District Board of Gujrát appointing a Draftsman was overruled by the Commissioner on the ground that the man selected for the post was son of a District Board member. The Commissioner wrote to the effect that either the member should resign his membership, or else his son should seek employment elsewhere. In no other case were proceedings set aside.

Rules.

188. Rules regulating the constitution of the Miánwáli District Board were published in Punjab Government Notification No. 96 of the 25th June 1902. The provisions of the rules for the guidance of District Boards published with the Notification of the Punjab Government in the Boards and Committees Department, No. 528½, dated the 26th February 1884, were extended to the Miánwáli Board by Notification No. 201, dated the 23rd August 1902, and by Notification No. 202 of the same date the Board was declared to be of the 2nd Class. Rules were also framed by the Board under Section 26 of the District Boards Act, 1883, and unanimously passed in a special meeting held for the purpose. They were eventually published in Punjab Government Notification No. 2 of the 5th January 1903, and adopted by the Board as rules of business.

Working of District and Local Boards.

189. The general working of District Boards has given satisfaction, and considerable interest seems to be evinced by the members in such matters as scarcity, plague, the breeding of good cattle and preservation of trees. In the Jullundur District the District Board has initiated a system of village sanitation in the larger villages, under which sweepers are entertained to clean the village streets, and are paid in the same way as the village watchmen. This innovation is creditable to those concerned. The work of many Boards has been much hampered by demands made on their resources in consequence of plague expenditure, and it has been necessary to give Government assistance in some cases. The financial condition of the Hissar and Rohtak District Boards has been seriously affected by a series of bad harvests, necessitating extensive remissions and suspensions.

Finances.

190. The accounts and finances of District Boards are noticed in Chapter V.

Municipal Administration.

Number of Municipalities and Notified Areas.

191. No new Municipalities were established and none of the existing ones abolished during the year under report. The town of Budhláda in the Hissar District was constituted a Notified Area under Punjab Government Notification No. 45, dated 3rd February 1903. The existing Notified Areas remained as before. The boundaries of the Municipalities of Pathánkot and Gujránwála were altered during the year in order, in the one case, to include the outlying blocks of the town on sanitary grounds, and, in the other, to include the newly-populated tracts round that town. The boundary of the Notified Area of Sángla in the Gujránwála District was also revised so as to include the whole of the town and the buildings south of the railway line there. There were no changes in the other Divisions.

Changes in the system of appointing members.

192. A change in the system of appointing members occurred in the Lahore Municipality, where Rule III of the Rules for the appointment of members was so amended as to reduce from 6 to 4 the number of members to be obligatorily selected from the Ráís class residing and possessing property in Lahore, and to thus enable the European community to be more equitably represented on the Committee. The number of members of three of the minor

Municipalities of the Lahore District was reduced during the year—at Sharakpur from 12 to 6 and at Khem Karn and Khudián from 9 to 6. This course was deemed desirable owing to the dearth of qualified men to fill the position of members of the Committee. In Simla the office of paid President was abolished on the expiry of the term of office of Mr. P. Donaldson, and the Deputy Commissioner of Simla was appointed by Government an *ex-officio* member and President of the Committee.

Elections.

193. There were 287 vacancies during the year amongst elected members, of which 90 only were contested, and the percentage of voters polling averaged about 60 per cent. In Delhi, Simla, Lahore and Amritsar the vacancies were filled without a contest, and, except in five or six minor Municipalities, the contests that did take place occasioned but little interest.

Meetings of Committees and attendance at meetings.

194. The more important Municipal Committees met much more frequently than they are required to do by rule, and the attendance was good. Delhi and Simla held 54 meetings each, Amritsar 33, and Lahore 26. Many of the minor Municipalities held less than the prescribed number of meetings, but in most cases this was due to the absence of any business for transaction. The Zíra Municipal Committee was again conspicuous for its apathy, 5 meetings having to be postponed for want of a quorum.

Irregular proceedings of Committees and proceedings overruled.

195. Very few cases occurred during the year which called for intervention on the part of the controlling authorities with the proceedings of Municipal Committees. In no case were the proceedings of any of the Municipal Committees in the Delhi Division overruled either by the Deputy Commissioner, Commissioner, or Government except in Rewári in the Gurgaon District, where, in a case of evasion of octroi duty, the Municipal Committee passed a resolution proposing to recover four times the amount of octroi properly leviable. The resolution was overruled by the Deputy Commissioner, as the Committee had no power under Section 187 of the Municipal Act to compound offences, and the Committee was directed to prosecute the man criminally under the Indian Penal Code. The Deputy Commissioner also set aside another resolution of this Committee in which it proposed to grant an allowance of Rs. 10 per mensem to the Assistant Surgeon, Rewári, for medical attendance on the High School boarders. The allowance was disallowed, as the Civil Surgeon did not support the proposal. In the Karnál and Ambala Districts some resolutions passed by Committees were at the suggestion of the Deputy Commissioners reconsidered amended or cancelled by the Committees, and the Deputy Commissioners' suggestions were in all cases promptly complied with. In the Jullundur and Lahore Divisions no cases occurred which called for interference. In the Ráwalpindi and Mooltan Divisions a few decisions affecting matters of a trivial nature were set aside by the Commissioner.

Rules and bye-laws.

196. In Delhi bye-laws were framed to regulate the assessment and collection of the house tax recently imposed there. In Simla the two Vice-Presidents and the Secretary to the Committee were empowered *ex-officio* and individually to compound offences against the Municipal Act. Bye-laws were framed by the Lahore Municipality for controlling the discharge of fireworks within Municipal limits, for registration of births and deaths, and for regulating the constructions of *tharrás* and projections. In Amritsar bye-laws were made for regulating the use of dhobi ghâts, for the working of a bonded-warehouse, and for the refund of octroi. Building bye-laws were also made, and the rules under the Hackney Carriage Act were amended. In Dalhousie bye-laws were framed for the control of butchers' shops, while the bye-law for the levy of the bazár frontage tax was amended.

General working of the Committees.

197. As a rule the working of Municipal Committees, especially the larger ones, has met with the approval of the local officers. The appointment of the Deputy Commissioner of Simla as an *ex-officio* member and President of the Committee, as well as the appointment of an Engineer Secretary, have had a very distinct effect in improving the administration of Municipal affairs.

TAXATION.

Imposition of new and withdrawal of old taxes.

198. A tax on thelás (carts) proposed by the Sirsa Municipality received the sanction of Government during the year. The rates of the house tax in the Fatahabad Notified Area were increased with effect from 1st October 1902. A proposal to impose a tax on vehicles within the limits of the Ambala Municipality, in order to cover a loan for the intra-mural sewage scheme, was submitted to Government for sanction, but the proposal was subsequently abandoned. A water tax at 2 per cent. on the assessed annual value of houses in Kasumpti came into force from 1st January 1903.

Income derived from taxation.

199. The total revenue derived from taxation in Municipalities and Notified Areas was Rs. 32,89,000 as against Rs. 34,65,000, showing a decrease of Rs. 1,76,000. The receipts from octroi decreased by over 2½ lakhs, but there was an increase of Rs. 80,000 from other taxation, mainly in the Delhi Municipality as a result of the new house tax.

Octroi.

200. The decrease in octroi receipts was shared by all Divisions as follows:—

	Rs.
Delhi	47,000
Jullundur	42,000
Lahore	1,33,000
Ráwalpindi	18,000
Mooltan	15,000

Last year the receipts were above the average, owing to the excellent rabi harvest, while in the year under review the harvests were poor and largely account for the decrease in income. Special causes, such as plague, also affected receipts, notably in the case of the Amritsar Municipality, where receipts fell by half a lakh, due almost exclusively to the depression and disorganization of trade in consequence of the prevalence of plague in and about the town. In the Delhi and Simla Municipalities large increases were recorded. In the former Municipality the main items of increase are under the heads Refined Sugar, Ghi and Building Materials, all of which were imported in larger quantities than usual on account of the Coronation Darbár. The increase in Simla is reported by the Deputy Commissioner to be mainly due to the introduction of the new octroi schedule, but the Commissioner would add as another cause the greater efficiency in collections consequent on the change of *régime* in Municipal government. As explained last year, the general orders issued by the Government of India necessitated the examination of existing octroi schedules with reference to the rates in force, but action in this direction has now been postponed in consequence of the receipt of a further communication intimating that the Government of India is prepared to allow higher rates than those at first suggested.

Other taxes.

201. The figures for the past year show increases on those of the previous year of Rs. 80,000 as above stated. The house tax in Delhi, which is the chief cause of this increase, is said to be unpopular and difficult to work. Direct taxation in the Simla Municipality worked smoothly. In Ambala coercive measures have constantly to be resorted to for the recovery of the water tax.

Incidence of taxation.

202. In the year under report the average incidence of all taxation was Re. 1-7-0 against Re. 1-8-5 in the previous year. The incidence of octroi, Class I (Grain) only, was Re. 0-12-1 against Re. 0-13-5 in 1901-02. The decrease is due to causes already explained. The average incidence of total octroi was Re. 1-4-6 against Re. 1-6-1. The average was exceeded in 15 of the larger towns and in the minor Municipalities of the Muzaffargarh District. It is worthy of note that the incidence of total taxation in the three largest cities, Lahore, Delhi and Amritsar, is practically the same, being slightly over Rs. 2 per head. As usual, the incidence of taxation is highest in the Hill Municipalities, but the standard of taxation at these hill stations must necessarily be higher than elsewhere.

Refunds of octroi.

203. In the Delhi Division the refund system seems to be worked satisfactorily on the whole, though in certain cases delays are reported to have taken place in the disposal of applications of refund. In the Jullundur Division the

Ferozepore Committee is reported to have been again conspicuously backward in the matter. In mitigation of the small amount refunded it is urged that many heavy claims for refund have disappeared as a result of declaring the premises of the leading European exporters to be "Bonded Warehouses," but the Commissioner is not satisfied that the Committee is giving anything like a fair proportion of refunds on its receipts from octroi. In Amritsar the refunds granted amounted to Rs. 58,000, or 16 per cent. of the gross income, which is a considerably higher figure than elsewhere. In Gujránwála it is said that refunds due could not be paid for want of funds, and the serious charge is made against this Committee that its accounts have not been properly kept, fictitious balances being shown when in reality the Committee owed large sums for octroi refunds.

Bonded warehouses.

204. Except in the case of a few of the larger Municipalities, bonded warehouses are little resorted to, and, as a rule, where refund rules are liberally worked there is little need for them. The general question of refunds and bonded warehouse arrangements will shortly come under consideration.

GENERAL.

Plague.

205. Plague was again very prevalent in many of the Municipalities of the Delhi, Jullundur and Lahore Divisions, but only appeared in 2 Municipalities of the Ráwalpindi Division and in 3 in the Mooltan Division. In Rewári the outbreak was very severe and there was considerable opposition to any measures being taken to check the disease. It created a panic, which resulted in five-sixths of the population leaving the town and spreading over the country, in many cases carrying the infection with them to parts that had before escaped. The members of the Committee as a rule behaved very badly, but the Tahsíldár, who had to be removed, set them a bad example in this respect. In the Ambala District the epidemic was much less virulent than in the preceding year except in Búriya; the attitude of the people was reasonable, and the conduct of the members of the Committee with a few exceptions satisfactory. In addition to inoculation, desiccation of houses was also resorted to, and was appreciated by the people to a certain extent in the towns of Ambala and Jagádhri. In the Jullundur District members of Municipal Committees rendered practically no assistance in the plague inoculation campaign. To the Khatrís, Baniás, Mahájans and similar classes, inoculation was anathema. In Fázilka, where there was a severe outbreak, the well-to-do inhabitants are reported to have immediately fled; the poorer classes only remaining, amongst whom the mortality is shown to have been great.

Health and Sanitation.

206. With the exception of plague, no other serious epidemic appeared anywhere, and the health of the Municipal towns was generally good. The progress of sanitation in the various Municipalities will be noticed in Chapter VI under the head "Sanitation."

Fires.

207. There were 11 actual cases of fire at Simla, or 4 more than in the previous year, resulting in serious damages in 2 cases only, the greatest being on the occasion of the fire which occurred on the 10th July 1902, when the Commercial Buildings and Northbrook Terrace, occupied principally by European firms, were almost entirely destroyed. The total loss by fire during the year at Simla is estimated at about 6 lakhs. The Fire Brigade was requisitioned in all these cases and did good work. A severe fire broke out in the town of Pind Dádan Khan, which reduced some 80 houses to ashes. Two fires—one at Hissar and the other at Bhiwáni—occurred during the year, both in connection with cotton factories. The latter fire was a serious one, several women having lost their lives in it, and formed the subject of a special report to Government. A fire broke out in the mohalla of sweepers at Hidáyatpur Chháoni Notified Area in the Gurgaon District. Fortunately there was no loss of life.

Delhi.

208. The importance of this city as a railway centre is steadily on the increase. The Agra-Delhi Chord Railway construction is being vigorously pushed on. The installation of electric lighting and the opening of the "Clarke Road" through the Queen's Gardens were amongst the more important events with which the Committee was concerned during the year.

Military (Volunteers).

Strength and Distribution of Volunteer Force.

209. The strength of the Volunteer Corps on the 31st of March 1903 is reported to have been as follows:—

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant-Instructors.
Punjab Light Horse.	...	Field Officers and Staff	6	...	...	...	...	...
	A	Lahore	3	9	49	58	54	2
	B	Delhi	...	2	13	15	15	...
	C	Ráwalpindi	3	8	47	55	54	1
	D	Pálampur	1	2	12	14	10	...
	Sec.	Ambala	1	7	27	34	30	1
	...	Add for Officers	...	...	...	14	14	...
		Total ...	14	28	148	190	177	4
1st Punjab Volunteer Rifle Corps.	...	Field Officers and Staff	8	2	...	2	2	9
	A	Lahore	2	17	66	83	76	
	B		3	11	72	83	81	
	C		3	9	71	80	77	
	D	Ráwalpindi	3	9	94	103	102	
	E	Amritsar	3	6	31	37	35	
	F	Delhi	3	4	33	37	37	
	G	Murree	3	4	73	77	77	
	H	Ditto	2	5	42	47	44	
	Half Company Cadets	Ditto	...	...	9	9	...	
	I	Dharmsála	2	1	15	16	16	
	K	Ferozepore	...	7	46	53	53	
	L	Siálkot	2	5	46	51	48	
	...	Reservists	...	...	87	87	59	
	...	Add for Officers	...	...	...	34	34	
		Total ...	34	80	685	699	742	9
2nd Punjab (Simla) Volunteer Rifle Corps.	...	Field Officers and Staff	6	...	...	...	4	3
	A	Simla	3	9	40	52	51	
	B		2	9	84	93	90	
	C		2	8	34	44	44	
	D		3	8	39	50	50	
	E		3	10	81	94	94	
	Det.	Kasauli	...	1	7	8	8	
	...	Reservists	...	1	47	48	15	
	...	Honorary and Supernumerary Members	2	...	...	2	...	
		Total ...	21	46	332	391	356	3
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	8	3	...	3	3	...
	A	Karáchi to Jungshahi	2	5	61	66	66	1
	B	Khánpur to Montgomery	4	13	103	116	116	1
	C	Lahore	6	11	142	153	150	...
	D	Lahore and Pathánkot to Lála Músa ...	3	13	84	97	94	3
	E	Jullundur to Ambala	2	5	55	60	60	1
	F	Saháranpur to Gháziabad	3	6	113	119	119	1
	G	Kotri to Radhan	2	6	64	70	70	1
	H	Lahore and Pathánkot to Lála Músa ...	4	18	103	121	118	...
	I	Jacobabad to Quetta	4	11	57	68	68	1
	K	Jhelum to Peshawar	6	16	101	117	117	1
	L	Rohri to Ruk	7	13	81	94	94	1
	M	Karáchi City	2	4	70	74	74	1
	...	Add for Officers	...	...	...	53	53	...
		Total ...	53	124	1,034	1,211	1,202	12
		Grand Total ...	122	278	2,199	2,491	2,477	28

The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps and the North-Western Railway Volunteer Rifles were inspected in February 1903. The 2nd Punjab (Simla) Corps was inspected in October 1902. The results were considered satisfactory.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this Chapter will be found in the Reports and Statistical Tables noted below] :—

PROVINCIAL REPORTS.

Agriculture.—(1) Report on the Operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1902.

(2) Annual Report on the Punjab Veterinary College and the Civil Veterinary Department, Punjab, for the year ending 31st March 1903.

(3) Report on the Land Revenue Administration of the Punjab for the agricultural year from 1st October 1901 to 30th September 1902.

(4) Annual Report on the Experimental Farm, Lyallpur, for the year ending 30th September 1902.

Weather Crops and Prices.—(1) Report on the Meteorology of the Punjab for the year ending 31st December 1902.

(2) Report on the Season and Crops of the Punjab for the year 1902-1903.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1903.

Forests.—Progress Report on Forest Administration in the Punjab for 1902-1903.

Mines and Quarries.—Reports on the working of the Dandot Colliery for the half-years ending 30th June 1902 and 31st December 1902.

Statement showing the produce of minerals and gems (for which reliable statistic are available) for the calendar year 1902.

Factories.—Report on working of the Indian Factories Act in the Punjab during 1902.

Manufactures.—Special Monographs on Industries of the Punjab.

Trade.—(1) Annual Returns of Internal Land Trade in the Punjab for the year ending 31 st March 1903.

(2) Report on the External Land Trade of the Punjab for the year ending 31st March 1903.

Irrigation—Revenue Report of the Irrigation Department in the Punjab for the year ending 31st March 1903.

Public Works.—Report of the Public Works Department, Buildings and Roads Branch, for the year ending 31st March 1903.

PUBLICATIONS OF GOVERNMENT OF INDIA, STATISTICAL OFFICE.

Agriculture.—As to *prices* see "Prices and Wages" in India, 20th issue 1903.

Weather and Crops.—(1) Agricultural Statistics of India, 17th issue, Tables 3-H., 4-H., 12 and 13-E.

(2) Area and yield of rice, wheat, &c., &c.

Mines and Quarries.—Statistics of Mineral Production in India, 5th issue 1903.

Manufactures.—Judicial and Administrative Statistics of British India, Table XIX.

Railways.—Administration Report on Railways in India for 1902.

Factories—Report for the year ending 31st December 1902.

Trade.—Accounts of the Trade carried by Rail and River in India, 15th issue 1903.

Agriculture.

EXPERIMENTAL CULTIVATION.

Lyallpur Agricultural Farm.

210. The first annual report on the working of the Lyallpur experimental farm has just been issued. The primary object which has been kept in view in arranging for the different series of experiments is the study of different varieties of Punjab crops, especially of wheat, and their improvement by cross-fertilization and selection. The rabi series of experiments in connection with Punjab wheats has so far received the most attention. During the first year 27 samples of different Punjab wheats were sown, and 11 of these were eventually selected as being of different varieties. Besides these 11 varieties a fresh series of different samples numbering 72 in all has been obtained from zamíndárs in different districts of the Province. A preliminary examination and classification of these varieties were made. Botanical samples were also forwarded to the Reporter on Economic Products for the Calcutta Museum. They will be sown and examined next harvest at Lyallpur, and a duplicate series has been sent to Hissar, to be grown and studied there on the experimental portion of the Hissar Cattle Farm, which is under Imperial Direction.

Rust in wheat.

211. A preliminary enquiry made elicited the following replies, showing the existing state of knowledge on the subject among the Punjab peasants:—

(1) There is no variety of wheat less liable to rust than others.

(2) Wheat grown from old seed does not escape more than wheat grown from fresh seed. This was also the result of a special experiment made at Lyallpur.

(3) A thickly sown, thickly growing crop is more liable to rust than a thin crop.

(4) Wheat grown on low-lying land and on sandy cold soil is more liable to rust than wheat grown in a more favoured locality.

(5) Rain and cloudy weather following artificial irrigation cause rust.

(6) On the other hand rain followed by sunshine causes it to disappear if not too far advanced. The same result follows a timely irrigation with well water. Cloudy weather in February especially induces rust.

Paspalum dilatatum.

212. The plot of this grass which was grown in the compound of the office at Lahore, having shown a strong growth as an irrigated crop and become well established last year, was left this year without irrigation. The test was a severe one, as the winter was rainless and the summer monsoon of 1902 was late. The plot still survives and has held its own against other grasses, but it shows signs of stress from the drought of the early summer, and it does not show much tendency to spread.

Sweet potatoes.

213. American varieties of sweet potatoes, *viz.* Nausemond, Red-nose and Hanover, have been cultivated at Ferozepore, Gujrát and Hoshiárpur with fairly promising results. The tubers are sweeter than the native varieties, but they have not yet found much favour with the people. The same varieties are now being grown on the Lyallpur Farm.

Australian salt bush.

214. Our efforts at introducing the salt bush in the Punjab have nowhere got beyond the stage of cultivation in nurseries or pot yards. A number of plants grown in the public gardens at Hissar promise more hopefully than any elsewhere. They have seeded, and the Deputy Commissioner is experimenting with the seed. But they had been grown with the aid of canal irrigation, and it must be admitted

that the salt bush which in Australia is a drought-resisting fodder bush is not required in places where there is canal irrigation. The difficulty, however, hitherto has been to acclimatize it under any conditions.

VETERINARY AND LIVE STOCK.

The Punjab Veterinary College.

215. The number of students on the rolls of the Veterinary College during the year was 128 as compared with 130 during the previous year. The results of the examinations in the 1st and 2nd year classes showed a distinct falling-off on those of previous years, but, on the other hand, the results of the examination for the 3rd year class, which was held for the first time, were very satisfactory, 18 out of 24 candidates passing. The falling-off in the former case occurred mainly among the military students, who, with few exceptions, had received very little primary education, and the Military authorities have recently been addressed on the subject with a view to greater care being exercised in the selection of students, and to alterations being made in their course of training. The Principal, in discussing the low results, laid much stress upon the fact that, whereas the subjects taught had increased from 4 to 7 and the number of students from 83 to 119, owing to the addition of a 3rd year's course, there had been no proportionate addition to the teaching staff, and he had actually been without a European Professor for 10 months. This is a very adequate explanation of any falling-off in the examination results. The shoeing class was much enlarged, 18 men being admitted to it, and all passing satisfactorily. A class of 30 Transport Dressers was sent to be trained at the College Hospital, and these completed a three months' course. In addition to this, 15 men of the Punjab Provincial Civil Veterinary Department went through a three months' Post-Graduates Course. The receipts amounted to Rs. 5,348-11-6 against Rs. 3,852-15-0 last year, and were the largest since the foundation of the College. This indicates an all-round increase in the number of patients treated. There were only 57 candidates for admission at the Entrance Examination held on the 20th April 1903, as against 134 in the previous year. The Principal attributes this to the severity of the examination, to the length of time required to gain the diploma, and to the fact that a certificate can be more easily obtained at another vernacular teaching school after a two years' course, and an easier examination than our old two years' test. It is very important that something should be done to remedy this by making diplomas show the standard of education attained, and by informing those Departments which employ Veterinary Assistants as to the classes of diplomas granted at the various colleges. 34 men have returned from service in South Africa, all of them with excellent testimonials from the Veterinary Officers and others under whom they have served. Reports have been received from Senior Officers in the Army Veterinary Department testifying to the professional skill and excellent training the men showed.

Castrations.

216. The number of castrations by Veterinary Assistants were 1,208 as against 1,312 last year. Of these 914 were horses, 107 mules, 165 bulls, and 22 other animals.

Imperial Horse-breeding.

217. There were 140 Imperial Horse Stallions in the Punjab on March 31st, 1903, against 156 last year. 123 stallions were employed on stud work, and these covered about 8,082 mares, against 7,246 in 1901-02. There were 12,398 branded mares on the register at the end of the year, an increase of 14·1 per cent. The principal Districts were—Shahpur (1,186), Lahore (1,135), Dera Gházi Khan (1,085), Jhang (1,067), Ráwalpindi (800), Gujránwála (867), Gujrát (738), Ferozepore (641) and Amritsar (590), these accounting for 8,109 branded mares. The average number of mares covered by each stallion was 65·71 against 59·39 last year. The results of the previous year's coverings are 16·14 per stallion, the total number of produce being 1,969.

Imperial Mule and Donkey-breeding.

218. Donkey stallions increased from 244 to 285, and 259 were on stud work, 237 being employed on mule-breeding and 22 on donkey-breeding. The coverings were 16,147 and 1,441 respectively, and the number of foals dropped as the result of last year's coverings were 3,064 mules and 191 donkeys.

District Board Horse, Mule and Donkey-breeding.

219. District Boards had 3 horse and 91 pony stallions at the end of the year, 89 of the latter being Arabs. Last year's total remained unchanged. The number of stallions owned by private persons was 3, as before. Pony stallions covered 5,741 mares as against 5,561 in the preceding year, and horse stallions 317 as against 223. The private stallions covered 87 mares. 1,459 foals were dropped; the number "not held" was returned as 2,676 and "not known" as 1,739. The average results per stallion were 15·52, 28·47 and 18·50 respectively. There were 13 donkey stallions at the beginning of the year and 11 were handed over by the Civil Veterinary Department after the close of the covering season. The total number of donkey mares covered increased from 50 to 403, and the average per donkey was 40·3 as against 10 last year.

Price of Horses and Mares.

220. There was very little fluctuation in the price of horses, but the demand for mares by horse-breeding grantees on the Jhelum Canal has led to an abnormal increase in the price of good and sound mares. These grantees have scoured the whole of the Punjab in search of suitable mares and have even gone as far as Jacobabad (Sindh).

Transfer of control of Imperial Horse, Mule and Donkey-breeding to the Army Remount Department.

221. For many years, Imperial Horse, Mule and Donkey-breeding in the Punjab has been carried on by the Punjab Civil Veterinary Department, two Veterinary Officers being in immediate charge of the North and South Punjab Circles. These operations have now been taken over by the Army Remount Department, who will concentrate their stallions in ten selected districts and the Chenab and Jhelum Colonies, and they will also control similar operations by District Boards in the selected tracts, besides dealing with contagious equine diseases.

Outbreak of dourine.

222. It is to be regretted that a disease diagnosed as "dourine" has recently made its appearance among a certain number of Government stallions and branded mares. The extent to which it is prevalent is still uncertain, but the matter gives ground for considerable anxiety, and it is possible that drastic measures may have to be employed for its suppression.

Live stock and cattle disease.

223. The number of animals attacked with various kinds of disease in 1902-03 was 48,316 against 55,601 last year, but the deaths increased by about 401 per cent., numbering 6,466. These figures are, however, much below those for the year 1900-01, when rinderpest alone claimed 8,121 deaths, and the total was 11,355 from all causes. The year 1901-02 was an exceptional one, but the statistics cannot be regarded as very reliable. It is more than probable that a considerable percentage of outbreaks are not reported at all. The figures for the most important diseases are as follows:—

	Cases.	Deaths.
Rinderpest	2,710	1,216
Anthrax	4,787	4,227
Foot-and-mouth disease	6,546	41
Pleuro pneumonia	115	90
Charbon symptomatique	425	359
Other diseases	33,733	533

The Superintendent of the Civil Veterinary Department, Provincial Circle, remarks, regarding anthrax, that he has satisfied himself that the majority of the cases classed as anthrax are in reality "hæmorrhagic septicæmia."

Good work has been done by the Provincial Civil Veterinary Department in the treatment and prevention of disease in cattle. Rinderpest inoculations increased from 1,279 to 21,457, all with the "serum alone" method, and there is good reason to believe that inoculation is gaining in popularity in many districts. There were 3,029 inoculations against anthrax, but these were stopped except under personal supervision of the Superintendent, Civil Veterinary Department, Provincial Circle, when it was discovered that most of the animals were in reality suffering from hæmorrhagic septicæmia. The anthrax serum is of no use against the latter disease, and if animals died of hæmorrhagic septicæmia after being inoculated against anthrax, the people would most likely lose confidence, as they cannot discriminate between the two diseases. It is satisfactory to note that Professor Lingard hopes in time to be able to provide a serum for hæmorrhagic septicæmia.

The Provincial Civil Veterinary Department.

224. The Provincial Veterinary Department, now that Imperial Horse-breeding has been taken out of its hand, will give its chief attention to matters connected with cattle. The Department was provincialised in October 1901, and satisfactory progress has been made in the arduous work of organisation during the year under report. There were 8 Veterinary Dispensaries at work during the year and these treated 1,628 in-patients and 15,235 out-patients. Veterinary Assistants treated 30,939 cases in villages.

AGRICULTURAL PESTS.

Entomology.

225. The sesamum crop was attacked by an insect called 'Sivvi' in the Montgomery District, and some damage was done by 'Mula' in Mooltan and by 'Toka' in Gurdáspur. An insect known as 'Tela' did great harm to the rape-seed crop in Ludhiána, Jhelum, the Tarn Táran and Ajnála Tahsíls of Amritsar, and in Ferozepore.

LOANS TO AGRICULTURISTS.

Advances under Act XIX of 1883 and Act XII of 1884 (Land Improvements and Agriculturalists Loans Act.)

226. After an interval marked by two good harvests—the kharíf of 1900 and the rabi of 1901—unfavourable agricultural conditions again supervened during the year under report. The results are apparent in the Provincial Loan Account, the district of Hissar being as usual the one most affected. The liabilities of this district under both Acts amounted at the close of last year to Rs. 9,10,252 and at the close of the present year to Rs. 11,46,312 in principal alone, in spite of remissions aggregating Rs. 1,60,803 from the amounts outstanding under Act XII of 1884. As regards Act XIX of 1883, there is one matter which needs special notice in this report. It is the question as to how far loans under this Act should be granted for the digging of village tanks in areas affected by scarcity. It will be remembered that the system was tried in the Famine of 1899-1900, but that it resulted in failure. The reasons for this failure were said to be the apathy of the people and the unwillingness of the proprietors to accept responsibility for fellow-proprietors who had left their village to seek work elsewhere. The conditions in Hissar during the past year, however, were peculiar. Testworks had been opened and had failed to attract workers, yet distress undoubtedly existed in a certain number of villages, and writing on the 20th February 1902, the Deputy Commissioner expressed the opinion that these villages would need assistance in some form or another between that date and the time when agricultural operations would again become possible on unirrigated land. The villages in which this form of assistance was to be given were to be carefully selected by an officer not below the rank of an Extra Assistant Commissioner: it had been ascertained that there was a real demand for loans of this description and the number of absentee proprietors was generally a small one throughout the district. The reasons given for the failure of the previous experiment were in consequence largely non-existent and the proposals of the local officers were sanctioned.

A good deal has been done of late years to simplify the procedure for the granting and recovery of loans. The former rigidity in the rules regarding collection was mitigated by giving Commissioners power to sanction remissions up to Rs. 250 under each Act, and under the rules, as at present worked, suspension or remission of loan repayments can be obtained upon much the same principles as govern the suspension and remission of land revenue. There are few signs that the passing of the Land Alienation Act has caused agriculturists to look more to Government for loans, but it is too early to gauge accurately the ultimate effect which will be produced upon the loan account, more especially in view of the abnormal agricultural conditions which have prevailed in the Province since the Act became law, particularly in those districts of the Delhi Division where the demand for *takávi* is usually highest.

PRICES.

227. As was to be expected in a normal year, the prices of food at the principal markets of the Province remained very steady. The rates have been moderate, and on the whole, rather lower than those of the past year. At Delhi wheat sold at from Rs. 2-9-4 to Rs. 2-10-9 per maund. The highest and lowest rates in Ferozepore, Lahore and Amritsar were Rs. 2-12-0 and Rs. 2-1-8. The highest prices at Ráwalpindi and Mooltan were Rs. 2-13-9 to Rs. 2-12-9. The price of maize rose to Rs. 2 per maund at Mooltan in the month of June 1903, but, otherwise, it has remained below this figure, the average rates being Re. 1-13-0 at Delhi, Re. 1-9-6 at Ferozepore, Re. 1-12-3 at Lahore, Re. 1-13-0 at Amritsar and Re. 1-15-0 at Ráwalpindi. Bájra has been selling at Re. 1-14-0 per maund at Ferozepore, Rs. 2-1-0 at Lahore and Rs. 2-4-0 at Ráwalpindi and Mooltan. The price of firewood has remained stationary everywhere, and there is no sign of a rise at present. The price of ghi has risen from Rs. 28-8-0 in January to Rs. 31 in June, in Delhi and Ferozepore, and, in other districts, a slight rise is apparent of about one rupee a maund. The price of salt remained unchanged up to the month of March when it fell by about 8 annas per maund, this being due to the reduction in the salt duty.

Weather and Crops.

Spring and Summer Rains, 1902.

228. The monsoon of 1902 broke somewhat early, on June 20th. This auspicious start was, unfortunately, not maintained. The rainfall of July was not general and was a little below the average. August witnessed a general break, until the 24th, when copious rain was received everywhere, except in the Hissar and Rohtak Districts and the Mooltan Division. The rains continued until late into September, and additional showers fell in the third week in October.

Winter Rains, 1902-03.

229. The winter rains were delayed until the fourth week of January. February was rainless, but there was copious, frequent and almost general rain in March and well into April. The districts of Delhi, Karnál, Hissar, Rohtak and Gurgaon, however, fared vary badly, none of them receiving as much as $\frac{1}{3}$rd of an inch in March.

Crops in Kharif 1902, and Rabi, 1903.

230. The two seasons were singularly alike. In each case the conditions were favourable at sowing time, and extensive areas were sown, but prolonged breaks in the rains caused the unirrigated crops to dry up over vast areas. Good rain at the end of each harvest largely redeemed the situation, and resulted in a good outturn of grain, the fodder being, of course, deficient. The spring crop revived in a remarkable manner after the prolonged drought, and the outturn of wheat was surprisingly high in many districts. Taking the Province as a whole the harvests were only a little below the normal. The districts showing the lowest returns were Hissar, and Rohtak and, in a less degree, Karnál. Owing to the lengthy breaks in the rains, in both seasons, crops

failed on 5,759,719 acres out of 26,239,724 acres sown. Out of this area, 2,600,458 acres were in the Delhi Division, the worst sufferer being Hissar, which returned crops failed as amounting to 1,304,499 acres, and matured crops as 492,987 acres. In the preceding year the crops harvested in Hissar amounted to only 248,332 acres, so that the district has passed through a very critical period. There was a bumper crop in 1900-01 when there were over two million acres of crops and the people have been living on this for two years. It is very fortunate that the present autumn crop (Kharíf 1903) is a good one for the cultivators of the district had come to the end of their resources. Rohtak and Karnál suffered in the same way as Hissar, but less severely. Of other and lesser calamities, it is only necessary to mention the injury caused by severe frost to sugarcane; the death from starvation of 40,000 sheep and goats in Leiah and Bhakkar owing to the prolonged drought; and a contraction in cultivation in the Mooltan District on account of an insufficient supply of water in the District Canals.

Total Crops.

231. The total area of crops successfully harvested amounted to 20,480,005 acres against 16,807,918 acres in the previous year and 26,142,237 acres in 1901-02. In this year's crop and season report the average of the two preceding years, which were 11-anna years and bumper years, respectively, has been assumed to represent the figures for a normal year, and, taking this standard, the area and yield of the year now reported on may be estimated at about 95 per cent., or a 15-anna crop. The figures for each harvest are as follows:—

Season.	Average of 1900-01 and 1901-02.	1901-02.	1902-03.	Difference from average + or −		Difference from last year + or −	
				Actual.	Per cent.	Actual.	Per cent.
	Acres.	Acres.	Acres.	Acres.		Acres.	
Kharíf	9,256,331	7,669,636	9,385,384	+ 129,053	+ 1·4	+ 1,715,748	+ 22·4
Rabi	12,218,746	9,138,282	11,094,621	− 1,124,125	− 9·2	+ 1,956,339	+ 21·4
Total ...	21,475,077	16,807,918	20,480,005	− 995,072	− 4·6	+ 3,672,087	21·8

Irrigated Area.

232. The total area of crops matured with the aid of irrigation was 9,353,140 acres against 8,853,917 acres in the previous year. By far the largest increase in the canal-irrigated areas is found in the area served by Government canals, *i.e.*, 356,911 acres, but there is also an increase of 63,039 acres in the area irrigated by private canals, of which 56,502 occurs in Ferozepore alone. The largest increases are in the districts of Jhang, Shahpur, Lahore and Ferozepore. The increase in Ferozepore is due to the good working of the canals, and other increases are the result of extensions of canal irrigation. The largest decrease, from 390,125 to 309,822 acres, has occurred in the Mooltan District, where the water in the rivers was very low. There is also a large increase, from 157,719 acres to 188,735 acres, in Hissar. The area irrigated by wells has gone up from 3,746,785 acres to 3,826,771 acres, and there is a similar advance in the figures for irrigation from other sources from 32,341 acres to 133,167 acres. The all-round increase in irrigation was to be expected from the nature of the season. Having sown a large area, the cultivators were compelled, during the breaks in the rains to utilise every available means of irrigation to keep the crops alive.

Kinds of Crops.

233. The distribution of the various crops was as follows:—

Crop.	1901-02.	1902-03.
Wheat	33·7	31·3
Barley	3·4	3·6
Jowár	5·1	5·9
Bájra	8·0	9·6
Maize	7·2	6·5
Gram	7·1	9·6
Other food crops	11·7	10·5
Oilseed	3·7	4·0
Sugarcane	2·1	1·6
Cotton	5·1	5·1
Others	12·9	12·3
Total	100	100

The variations in the figures do not call for any remarks. Turning to special crops, wheat covered 6,413,796 acres and, as already remarked, the outturn was exceptionally good in many districts In the Hoshiárpur District the yield is said to have been the largest since settlement, and Ráwalpindi, Dera Gházi Khan, Amritsar, Gurdáspur, Siálkot, Gujránwála and Ferozepore, all report yields above normal, particularly on irrigated areas. The grain was less satisfactory on unirrigated areas. The total outturn is estimated to have been 2,389,897 tons, and the crop is estimated at 97·3 of the normal. The conditions were favourable for gram, and there was an extension of the area under this crop to 1,974,687 acres. The Ferozepore District reported an outturn in some tracts in excess of that of 1901. For the whole Province, however, the crop was 88·6 per cent. of the normal. The bájra crop did well, and, here also, there was a larger area amounting to almost two million acres. There was a 95 per cent. crop. There was a contraction of the area under maize to 1,328,265 acres, but the crop was a very good one. Jowár was matured on 1,206,775 acres and the crop was 90·6 per cent. of a normal one. The matured area under sugarcane declined to 320,208 acres, the outturn also being below the average, on account of severe frosts. Cotton covered more than a million acres, and is growing annually in importance. Ginning mills are still increasing in numbers, and these, combined with good prices, have given a great impetus to the crop. The yield was 229,000 bales as compared with a decennial average of 179,700 bales. Fodder crops were more widely grown than usual, owing to the small stocks of fodder after the inferior spring crop of 1902.

Horticulture.

Fruit Trees.

234. 4,000 young fruit trees were as usual distributed from the Mahásu Orchard. The trees were sent to Kángra, Kohát, Bannu, the Malákand, Simla, Hazára, Ambala, Lahore, Jhelum, Pind Dádan Khan and Kurram. The number of apple trees available for distribution from these gardens is much below the demand for this kind of fruit tree, while there are too many almonds and walnuts. The reports of fruit culture in the neighbourhood of Simla are encouraging. No new trees were planted in the Shálámár or Shahdara Gardens. Mr. Hein, the Superintendent of the Agri-Horticultural Gardens, Lahore, inspected the mango groves in the former garden, the condition of which has not been satisfactory during the last few years. This year the income from this garden, including the sale of trees, amounted to Rs. 1,765 compared with only Rs. 506 last year. The Shahdara gardens have, on the contrary, realized only Rs. 468 on account of the sale of fruit compared with Rs. 882 last year.

Lahore Agri-Horticultural Gardens.

235. The income of the year under report was estimated at Rs. 14,500 and actual income was Rs. 16,975-14-4 as against Rs. 15,566-12-6 in the previous year. The sale of garden produce, &c., realized Rs. 13,905-3-4 as against Rs. 13,014-12-6 in the previous year. The total expenditure was Rs. 24,375-11-2 and the excess expenditure over the income was therefore Rs 7,399-12-10, which was met from the annual grant of Rs. 9,000, which is contributed by Government for the maintenance of the garden. It should, however, be stated that in the total of expenditure given above is included the sum of Rs. 1,163-2-0 on account of pay, allowances, &c., of Mr. O. T. Hemsley as Assistant Superintendent for five months. The cost of maintaining the Botanical section of the garden, which yields no income, amounted to Rs. 659-12-9 as against Rs. 656-5-2 in the previous year. Various experiments were made with seeds, but none of the results are worth noticing. In future most of the agricultural experiments will be made at the Lyallpur Experimental Farm. Two flower shows were held during the year.

Alterations in management.

236. The garden roads which were formerly under the care of the Municipal Committee, have recently been handed over to the Garden Committee, the Municipal Committee contributing a lump sum of Rs. 1,000 per annum towards their upkeep and extension. The Garden Committee are now preparing a scheme for the extension and improvement of these roads. In January of this year the executive control of the garden passed from the President to an Honorary Secretary. Formerly the executive control rested with the President, who was, however, seriously handicapped in this matter, owing to his unavoidable absence from Lahore for the greater part of the year. The present arrangement should ensure constant personal supervision. At the same time a Vice-President has been appointed, Sub-Committees have been formed for various purposes, and the Committee itself holds monthly meetings which are well attended.

Forests.

Alteration of Area.

237. During the year 1902-03 the area of Reserved Forests underwent a net decrease of 12,747 acres. 38 acres of Minárgarh Forest were reserved during the year and 7,750 acres of Kotmoman Reserve in Shahpur were disforested for colonization purposes. Various areas in Jhelum amounting to 685 acres were disforested, while a reduction of 4,091 acres is due to corrections of area. The Protected Forests show a net decrease of 21,299 acres due to more accurate area figures having been supplied by the Forest Survey Department. Under Unclassed Forests 164,521 acres were excluded in Shahpur owing to transfers to the Colonization and Irrigation Departments, whilst in Kángra 131,274 acres of Jágír Forests under the control of the Department have now been brought on to the books. In Jhelum 47,209 acres were added and 15,591 acres excluded owing to interchanges of areas under the Deputy Commissioners and those under Departmental control. The 7,750 acres of Reserved Forests which have been disforested in Shahpur have been added to the area of

Unclassed Forests. The net increase in the area of Unclassed Forests was 2,016 acres. At the end of the year the area of forests under the Forest Department stood as follows:—

	Acres.
Reserved Forests	1,468,182
Protected Forests	3,149,380
Unclassed Forests	1,449,970
Total	6,067,532

Demarcation.

238. 87 new masonary pillars were built and 1,977 old ones repaired. The total expenditure was Rs. 3,212 as compared with Rs. 2,947 in 1901-02.

Surveys.

239. Surveys on a scale of 4 inches to one mile were carried out by the Imperial Forest Survey Branch in 61 square miles of the Ráwalpindi Division and in the Pabbi Reserve of the Chenab Division. The survey of the Jubbal and Taroch State Forests was finished.

Working Plans.

240. The provisions of existing Working Plans have received proper attention during the year. The preparation of the Pabar Working Plan remained in abeyance pending the completion of the demarcation which is now in progress. The Kángra Working Plan has been practically completed and will shortly be submitted for sanction. The Kotgarh and Kot Khái Working Plan has been sanctioned since the close of the year. The Jubbal Working Plan has been submitted for sanction. Plans for the Hill States of Balsan, Theog and Mailog were completed, and Plans for five other States are under preparation.

General Protection and Breaches of Forest Law.

241. There were 3,890 cases of forest offences, or a decrease of 196 cases as compared with the previous year. The total number of cases taken into court amounted to 872 against 1,213 in the previous year, showing a decrease of 341 chiefly in Bashahr, Ráwalpindi, Kángra and Jhelum, which is attributable to the effects of previous punishment and to a larger number of cases being compounded. Convictions were obtained in 711 cases. Under Section 67 of the Forest Act 2,894 cases were compounded for Rs. 8,561-14-9, the average amount per case and per person fell from Rs. 3-12-1 to Rs. 2-15-4 and from Rs. 2-4-3 to Re. 1-14-1 respectively.

Fire Protection.

242. On the whole the year was not favourable for fire protection, for, although the winter rains and snow were plentiful, the exceptional drought and heat during May and June rendered forests in the lower hills most inflammable. 203 fires occurred during the year, burning 17,938 acres against 270 fires and 12,291 acres in the previous year. The percentage of area burnt to the total area under the Forest Department was 0·3 per cent. as compared with 0·2 per cent. in 1901-02 and 0·1 in 1900-01.

Regulation of Grazing.

243. The areas under the Forest Department which were available for grazing are as follows:—

Year.	*Entirely closed.*	*Partially closed.*	*Open.*
	Square miles.	Square miles.	Square miles.
1901-02 ...	608	1,104	7,752
1902-03 ...	657	1,153	7,671

Reproduction, Natural and Artificial.

244. In favourable situations where there is a fair rainfall and not too much cover overhead, or too dense undergrowth on the ground, the self-sown deodár seedlings have in many places been observed coming up like a crop of corn. On the other hand, in very damp, or very dry situations, in deciducus forests with scattered deodár and heavy undergrowth, reproduction is bad, or wholly absent. Reproduction of other valuable species in the hills, particularly of the blue-pine, is generally excellent in favourable localities. In the Plains forests natural reproduction has not much chance. Deodár was sown and planted in all the Hill Divisions, but a large proportion of the area sown did not succeed. The usual sowing and planting of shísham in the Chánga Mánga and Shahdara Plantations were largely failures.

Experiments.

245. No fresh experiments were made with exotic conifers, as their introduction into the Himáláyan forests is considered unnecessary. The older Spanish chestnut in Bashahr bore fruit abundantly, and steps are being taken to extend its cultivation both in Bashahr and Kulu. The excellent growth of some Eucalyptus in the forest compound at Chánga Mánga has led to the experimental sowing of seed obtained from Madras, and it is believed that a large outturn of fuel could be obtained if the species succeeds. Efforts to introduce the bamboo Dendrocalamus strictus into the Jhelum Rakhs did not succeed, but will be continued. Further experiments were made with Robinia and Podophyllum emodi; whilst the latter were successful in Chamba, success with the former is only obtained on good soil.

Outturn of Forest Produce.

246. The following statement gives a summary of the produce removed from the forests during the year under report:—

Agency.	Timber.	Fuel.	Bamboos.	Grass and grazing.	Minor produce.
	Cubic feet.	Cubic feet, solid.	No.	Rs.	Rs.
Goverament	1,244,389	4,746,881	113,670	...	28,894
Purchasers	824,002	1,173,783	863,534	1,32,947	16,229
Free grantees	40,933	101,692	...	7,844	...
Right-holders	957,389	33,309,897	...	2,95,382	44,772
Total ...	3,066,703	39,332,253	977,204	4,36,173	89,895
Total for 1901-02 ...	3,439,299	38,612,334	974,939	4,42,190	89,574

Financial Results.

247. The following statement compares the revenue and expenditure of the year with that of the two preceding years, excluding figures of the Hazára Division:—

Year.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1900-01	11,19,297	7,68,256	4,23,041
1901-02	14,60,452	9,27,760	5,32,692
1902-03	15,91,665	11,40,987	4,50,678

During the year an extraordinary payment of Rs. 1,61,583 was made on account of the share of profits of the Chamba State for the three years 1899-1900 to 1901-02. Excluding this payment the financial results compare with those of the previous year as follows:—

Year.	*Revenue.*	*Expenditure.*	*Surplus.*
	Rs.	Rs.	Rs.
1901-02 ...	14,60,452	9,27,760	5,32,692
1902-03 ...	15,91,665	9,79,404	6,22,261

The revenue was greater than that of the previous year by Rs. 1,31,213, the increase being chiefly attributable to larger sales of departmental fuel. Not

taking the special payment above noticed into account the expenditure rose by Rs. 45,129, principally due to the more extended Departmental extraction of fuel.

ARBORICULTURE.

248. Only triennial reports are issued on this subject. The article in last year's Administration Report covered the years 1899-1900 to 1901-02. The subject will not be noticed again till 1904-05.

Mines and Quarries.

Gold. 249. 78 ounces of gold were produced in the Punjab during the year 1902, of which 41 came from the Jhelum District and the rest from Ráwalpindi, Hoshiárpur, Miánwáli and Ambala.

Iron. 250. 7½ tons of iron were produced in the Simla District.

Petroleum. 251. 1,448 gallons of petroleum were extracted, of which the greater quantity came from the Ráwalpindi District and the rest from Miánwáli.

Coal. 252. At the Dandot Colliery in the Jhelum District, which is worked by the North-Western Railway, 55,373 tons of coal were produced as against 67,730 last year. The decrease is due to the working out of the Pidh Mine. The gross profit of the undertaking from the commencement of the operations to 31st December 1902 amounted to Rs. 11,23,831.

Factories and the Factory Act.

Number of factories. 253. The report on the working of the Factories Act for 1902 shows that there were in the Punjab 166 Government and private factories worked wholly or partly by steam power as against 152 factories last year. 19 new factories (of which 8 are in the Jhang District) were brought on to the register, and 7 were struck off for having stopped work. Two of the working factories are said to be in liquidation. The health and wages of the operatives were on the whole satisfactory.

Accidents. 254. There were 157 accidents (of which 7 were fatal) during 1902 as compared with 115 in the preceding year, and this increase is due to a great extent to the employment of inexperienced hands. It is probable that minor accidents are not fully reported.

Classes of factories. 255. 105 of these factories are cotton-ginning and pressing factories 10 are flour mills and 6 metal foundries.

General. 256. The provisions of the Factories Act in respect of the employment of women and children do not seem to have been complied with in certain factories. The machinery in most of the factories in the Province is reported to be properly fenced and guarded. There were two prosecutions during the year under report under Section 15 (1) of the Factories Act; in both cases the accused were convicted and fined. The question of generally insisting on adequate precautions for preventing and dealing with fires is now under the consideration of Government. The question of extending an Act (Act II of 1902), to provide for the inspection of Steam Boilers and Prime Movers to particular places where Steam Boilers and Prime Movers are to be found is under consideration. The extension of this Act will remove the existing complaint that most of the factories in the Province are in charge of mere Mistrís, and not professional Engineers.

Trade.

257. The total trade in all articles, exclusive of animals and treasure, is shown in the following table :— Total trade of the year.

		Imports.			Exports.		
		By rail.	By river.	Total.	By rail.	By river.	Total.
1900-01	Weight, in maunds ...	16,771,088	172,064	16,943,152	15,131,419	834,807	15,966,226
	Value, in rupees ...	12,81,77,559	10,49,245	12,92,26,804	9,67,45,140	32,18,274	9,99,63,414
1901-02	Weight, in maunds ...	20,122,123	183,010	20,305,133	36,667,658	1,719,750	38,387,408
	Value, in rupees ...	15,37,09,039	10,94,584	15,48,03,623	15,02,61,891	49,28,510	15,51,90,401
1902-03	Weight, in maunds ...	25,135,040	143,260	25,278,300	24,872,335	1,422,598	26,294,933
	Value, in rupees ...	15,46,12,201	9,29,599	15,55,41,800	11,49,88,493	40,04,535	11,89,93,028

The weight of imports has increased again by about ⅓ a crore of maunds, but the value remains practically stationary, maintaining the rise noticed last year. Exports fall 1½ crores of maunds in weight and over 3½ crores of rupees in value. Again the inconstant factor of agricultural conditions contributes mainly to this result, as the following table showing rail-borne grain trade proves :—

Grain and Pulse excluding river-borne trade.

Year.	Imports.		Exports.	
	Mds.	Value, Rs.	Mds.	Value, Rs.
1900-01	4,013,354	1,33,46,195	8,204,893	2,60,36,050
1901-02	1,415,916	45,84,943	23,681,644	6,06,41,377
1902-03	1,885,921	55,42,793	17,553,997	4,18,04,139

It will be seen that grain imports shew a slight rise and exports assume a position midway between the high figure reached last year and the unusually low records of 1899-1900 and 1900-01. This probably represents a tendency to approach the normal, after the bumper rabi of 1901.

258. River-borne trade naturally fluctuates little and seems to hold its own fairly against railway competition. A slight decrease is shewn this year, but last year's figures were perhaps unusually high. A comparative table is given below :— River-borne trade.

Year.	Imports.		Exports.	
	Quantity, in maunds.	Value, in rupees.	Quantity, in maunds.	Value, in rupees.
1898-99	110,814	8,44,077	1,758,575	50,75,847
1899-1900	146,100	10,06,603	1,339,486	49,52,470
1900-01	172,064	10,49,245	834,807	32,18,274
1901-02	183,010	10,94,584	1,719,750	49,28,510
1902-03	143,260	9,29,599	1,422,598	40,04,535

Imports.

259. As regards variations under individual heads the only noticeable increase in imports is one of 68½ lakhs of rupees under Woollen Munufactures (other sorts), due almost entirely to a rise from Rs. 1,70,000 to Rs. 74,15,000 in goods received from the United Provinces of Agra and Oudh. Viewed in conjunction with a decline of 9½ lakhs of rupees in the value of woollen European piece-goods imported, this would seem to indicate that the manufacturing industries of this country are finding increased favour in the Punjab. On the other hand, imports of cotton piece-goods (Indian) have received a slight check (perhaps owing to the enormous increase of 40 lakhs noticed last year) and record a fall of 18½ lakhs in value. A decrease of 54½ lakhs of rupees is shown under imports of refined sugar. Materials for a full explanation of this are not available, but a rise of between 20 and 30 lakhs was reported last year. This was to be attributed mainly to the low rates ruling in Europe towards the end of 1901, which, together with the prospects of a bad cane crop in India, caused large shipment to be made in 1901-02, and perhaps by over-stocking the market accounts for part of the present decline. The only other noticeable decrease in imports is one of over 100 lakhs under the head "Treasure," and is partly accounted for by the general decline in exports already observed.

Exports.

260. In exports 30 lakhs worth of European woollen piece-goods more than last year passed from the Punjab into the United Provinces of Agra and Oudh. As stated above, the Punjab took 68½ lakhs worth of Indian woollen piece-goods more than last year from the United Provinces. The inference seems to be that, while the Punjab consumer prefers the locally manufactured article, in the United Provinces he prefers to use foreign goods. The progress in railway enterprise in the United Provinces is shown by the increase of 24 lakhs in the value of Railway plant and rolling stock exported thither. The principal decreases in exports are in agricultural produce as under :—

Article.	Decrease in lakhs of rupees.
Grain and pulse	112
Wheat	76
Rape and mustard	240
Other oilseeds	47

A general explanation of this has already been offered. It is not improbable that part of the decrease is attributable to the storing of grain by agriculturists instead of its sale. They were forced by the reduced condition of their finances to sell much of their 1901 produce which they would otherwise have stored.

Distribution.

261. Little variation is shown in the statistics of trade distribution. Karáchi maintains its position fairly owing mainly to large exports of grain from the Chenab Colony, but the United Provinces trade takes an upward movement both in imports and exports, and regains almost exactly the position which it held in 1900-01. There is no practical change in the percentage of total trade taken by each internal block.

General.

262. Rates of carriage of grain have been reduced on the East Indian Railway, but otherwise there was no important change in freight.

Trade with Trans-Frontier Countries.

General results.

263. The provincial totals both of imports and of exports have declined as compared with last year in weight as well as in value. Imports shew a decrease of 23 lakhs of rupees in value and exports a decrease of 9 lakhs. Kashmir monopolises 91 per cent. of imports and 96 per cent. of exports, the remainder being distributed between Kábul, Ladákh and Chinese Tibet. The value of

imports of all kinds was—

	Rs.
In 1900-01	2,03,44,069
„ 1901-02	1,31,74,171
„ 1902-03	1,08,71,591

The value of exports was—

1900-01	2,11,57,574
1901-02	1,16,26,887
1902-03	1,07,23,722

Kashmir Trade.

264. The chief cause in the drop of trade to and from Kashmir is due to plague. Ludhiána City, a large trading centre, was so badly infected that it is little wonder that traders avoided the place. Imports of course suffer more than exports, and shew a decline of over 21 lakhs since last year, which in its turn exhibited a decrease of 13 lakhs as compared with the preceding year. The only noticeable increases are under Charas, Raw Silk, Timber, and Silver. Of these the first and the last two articles would hardly be subject to the influence which affect the current of ordinary trade, while, as regards Raw Silk, the Commissioner of Ráwalpindi remarks that he believes the increase to be due to the sericulture operations which have been taking place in Kashmir. Substantial decreases appear under Non-intoxicating Drugs, Fruits of all kinds, Hides, Ghi, Linseed, Spices, Manufactured Wool, and Gold. Only Gujrát and Siálkot exhibit increases in the total volume of imports. In the case of the former it may be hoped that trade is recovering after the panic caused mainly by plague in the preceding year, while, as regards the latter, the existence of the Jammu Railway removes the district from the ordinary class of those which possess road-routes only. With a decline in imports it is only in accordance with economic principles that exports should also decrease: this they did to the extent of over 8 lakhs. An increased quantity of Silver has been exported while Gold remains about stationary. The year has been marked by a large increase in the amount of wheat supplied to Kashmir. This increase is probably due to the export by rail of large quantities of surplus grain from the Chenab Colony. The chief decreases in exports are under the heads Piece-goods, European and Indian, Salt and Refined Sugar. The first and last named are articles which would naturally be particularly liable to feel the effects of trade depression.

Ladakh Trade.

265. The total value of trade with Ladákh has decreased by about a lakh, of which two-thirds is due to less imports and one-third to less exports. Of imports, Borax, Charas and Raw Silk exhibit the chief decreases. Charas is the most valuable import, absorbing no less than Rs. 5,58,650 of a total of Rs. 6,80,555 at which the year's imports are valued. There was a decline of Rs. 23,470 in the value of the Charas imported during the year, but an increase in quantity from 3,667 maunds to 3,871. The Yárkand traders brought in a larger amount of Charas in the hope of selling it at the abnormally high rates of last year, but the price fell from Rs. 160 per maund at the end of last year to Rs. 140 at the end of the year under report. Of exports, European piece-goods exhibit the only noticeable decrease, which is ascribed to the fall in the value rates of Charas, for which these articles are taken in exchange.

Chinese Tibet Trade.

266. The trade with Chinese Tibet is represented by imports valued at Rs. 2,02,276 as compared with Rs. 2,93,909 last year, and by exports valued at Rs. 39,972 as against Rs. 41,751 in 1901-02. The Deputy Commissioner of Simla ascribes the decreases to the plague at Ludhiána, already referred to, and to the circumstance that during the last rainy season several bridges on the Upper Kanaura were washed away, thus interrupting communications. No further explanation is given of the remarkable decrease in the value of Raw Wool imported, amounting to Rs. 97,620.

Trade with Kabul.

267. The value of imports from Kábul shew a decline from Rs. 35,000 to Rs. 30,000, while exports rise from Rs. 28,000 to Rs. 40,000. Under imports Sheep and Goats and Hides shew an increase, while Fruits of all kinds exhibit a marked decrease. Drought and a failure of fodder in the exporting districts are

said to account for both these variations. The only other import worth notice is Non-intoxicating Drugs: under this head a considerable increase is shewn. There is an all-round rise in exports: Rice of a coarse description, which finds a ready sale amongst the lower classes across the border, and Piece-goods, both Indian and European, are the chief contributors to this increase. It would seem that the fluctuations shewn this year both in imports and exports are sufficiently accounted for by the good season enjoyed in British territory and the bad season across the border.

JOINT STOCK COMPANIES.

Number of Companies.

268. There is a net decrease of 2 in the number of companies divided into shares, 49 being in existence at the end of the year compared with 51. Four companies ceased to work during the year, while 2 new companies were registered.

Increase of Capital.

269. The net increase in nominal capital is Rs. 2,60,000 accruing from increases of capital registered during the year of 3 companies. For, although the 2 new companies registered brought additional nominal capital of Rs. 3,00,000, the same amount was written off in respect of the 4 which ceased to work. The net increase in paid-up capital was Rs. 4,10,599, the actual figure of Rs. 5,53,136 being reduced by Rs. 1,42,537 written off in respect of the companies which ceased to work. The figure of paid-up capital now stands at 83½ lakhs (roundly).

New Companies registered.

270. The new companies registered are a trading company at Batála, and the factory at Sujánpur, which since the seventies has manufactured sugar and spirits, and in later years carbonic acid gas. This concern was originally registered as the Punjab Sugar Works Company, Limited, in 1877, but was dissolved in that form in July 1888. Thereafter the concern was worked but not as a Joint Stock Company; it has however now been formed into one afresh under the title of the Punjab Sugar Works and Patent Carbonic Acid Gas Co., Limited, with a nominal capital of 2 lakhs.

Increase in Paid-up Capital.

271. The gross increase of Rs. 5,53,136 in paid-up capital is spread over 30 companies, and the increase of Rs. 2,60,000 in nominal capital is spread over only 3 companies. The most noticeable increases in paid-up capital have occurred in respect of—

The Commercial East India Agency Company, Limited (by Rs. 63,525);

The Lahore Spinning and Weaving Mills Company, Limited (by Rs. 1,31,163);

The Saran and Company, Limited (by Rs. 1,14,066);

The Diamond Jubilee Flour Mills Company, Limited (by Rs. 34,096).

Four other companies increased their paid-up capital by something over Rs. 20,000 each.

The Himáláya Glass Works, Limited, which was registered at the beginning of 1901, had payments of its nominal capital of half a lakh practically completed in the year under report.

Fully Paid-up Capital of Companies.

272. Of the 49 companies at work 10 have their capital fully paid up, *viz.*, Alliance Bank of Simla, Limited (Rs. 10,00,000), Imperial Carrying Company, Limited (Rs. 4,00,000), Delhi Cotton Mills Company, Limited (Rs. 5,00,000), Krishen Mills Company, Limited (Rs. 7,00,000), Bhiwáni Press Company, Limited (Rs. 61,000); Pánipat Press Company, Limited (Rs. 70,000), Delhi Cloth and General Mills Company, Limited (Rs. 7,00,000), Ganesh Flour Mills Company, Limited (Rs. 4,00,000), Kángra Valley Slate Company, Limited (Rs. 1,20,000), and Murree Brewery Company, Limited (nearly Rs. 18,00,000).

Capital how invested.

273. As to the distribution of paid-up capital, by far the largest amount is invested under the heads "Cotton and Woollen Mills and Presses" and "Other Mills and Presses" which absorb Rs. 41,93,220. Under the head "Breweries" Rs. 18,00,000 (roundly) are invested, this being the capital of the Murree

Brewery Company, Limited, which is the only brewery registered in this Province. Under the head "Banking Loan and Insurance Company," Rs. 15,39,093 are invested, Rs. 10,00,000 of which form the capital of the Alliance Bank of Simla, Limited. Trading companies show Rs. 6,32,981, of which 4 lakhs form the capital of the Imperial Carrying Company, Limited, founded by Dhanjibhoy and Sons of Ráwalpindi. Under "Mining and quarrying" the Kángra Valley Slate Company shows Rs. 1,20,000, and under "Ice Manufacture" one Ice Company shows Rs. 62,792.

Companies in Liquidation.

274. 22 companies are in liquidation, or are otherwise defunct, which cannot yet be written off because not finally dissolved. The total nominal capital of these companies was Rs. 45,57,500 and the paid-up was Rs. 19,82,406. The four which ceased to work during the year are named below:—

The Punjab Hosiery and General Manufacturing Company, Limited;

The General Printing and Stationery Company, Limited;

The Imperial Steam Laundry Company, Limited; and

The Delhi Oil and General Soap Mills Company, Limited.

Number of Companies limited by Guarantee.

275. Of companies limited by guarantee there were 11 at the commencement and 12 at the close of the year under report. These companies are mostly clubs such as the United Service Club of Simla, and one is the Punjab Trades Association composed of members of the European shopping interest.

Fees realized.

276. The total fees realised amounted to Rs. 1,092 compared with Rs. 1,911. The decrease is mainly due to the remission of the fees previously payable upon registration of balance sheets which was authorised by Government of India Resolution No. 1357 S. R., dated 6th March 1902.

Public Works.

ESTABLISHMENT.

Executive charges.

277. Some alterations in the extent of the Executive charges were again rendered necessary owing to the concentration of work in new areas, and also to the undertaking of some large sanitary works for certain Municipalities. At the beginning of the year there were 10 Executive Divisions in the three Circles of Superintendence, and one Special Division for the Simla Extension Works under the Sanitary Engineer. The former has now been expanded into 11 Divisions, and a 12th has been sanctioned but not yet manned, owing to shortness of establishment. The Sanitary Engineer, in addition to a Division for Simla, has now, under his direct supervision, a Division for Amritsar City, where the water-works are in progress and large extensions of drainage works are contemplated.

FAMINE RELIEF WORKS.

Relief Programmes.

278. An Imperial grant of Rs. 8,00,000 was sanctioned for Famine Relief Works in charge of the Public Works Department, but the rainfall over the unprotected areas of the Province was favourable, and no relief works were found necessary. Projects, aggregating Rs. 49,92,500, have now been worked out in the 2nd Circle, and, in the event of famine, these will be capable of providing labour for 263,990 people for six months. Similar projects, aggregating Rs. 4,27,487, and capable of supporting 19,377 labourers for six months, have also been worked out for the 3rd Circle.

MILITARY WORKS.

Military Works.

279. There are practically no Military Works, proper, now, in the Punjab, owing to the incorporation of the Frontier Districts in the North-West Frontier Province, but the following ordinary works were carried out, or in progress, during the year:—3 masonry reservoirs for supplementing the water-supply of the Lawrence Military Asylum at Sanáwar, completed at a cost of Rs. 48,768; the United Service Institution and Library at Simla, completed for Rs. 42,256, and the establishment of an encamping-ground with supply-house and well at Chakki in the Gurdáspur District, in progress.

IMPERIAL CIVIL WORKS.

Imperial Civil Secretariat.

280. The new Imperial Civil Secretariat at Simla was in active progress, and will probably be ready for occupation by July 1904. Rupees 3,71,503 were expended on the building during the year, and Rs. 6,61,998 up to date.

Other works.

281. A few small works at "Viceregal Lodge" were completed during the year and some additions and alterations to "Snowdon" for His Excellency the Commander-in-Chief were in progress. Designs for the new General Post Office at Lahore, estimated to cost Rs. 2,96,953, were sanctioned by the Government of India in August 1902. The work was put in hand in the following month, and the foundations were completed by end of March 1903. The Telegraph Office at Lyallpur and the combined Post and Telegraph Offices at Sargodha and Miánwáli were in progress. Other works completed were:—Providing main cables for electric light, "Squires Hall," Simla; quarters for peons attached to the Telegraph Office, Simla; purchasing furniture for "Snowdon"; meteorological observatories at Serain and Kálabágh in the Simla District; accommodation for servants of the Revenue and Agricultural and Civil Veterinary Departments, Simla.

PROVINCIAL CIVIL WORKS.

Mayo Hospital and Delhi Reformatory.

282. The following important works were completed:—

The Opthalmic Ward, Mayo Hospital, Lahore, as originally sanctioned was practically completed at the commencement of the year, but further additions led to a revised estimate, and the entire work has now been finished at a total cost of Rs 62,945. The old Lunatic Asylum at Delhi has been converted into a Reformatory at a cost of Rs. 57,439.

Other works completed.

283. Other works completed were—

Land Revenue.—Combined tahsíl and thána at Toba Tek Singh, and also at Samundri; tahsíl at Gujrát; new record room for Deputy Commissioner's Court at Jhelum; re-roofing the record room of the District Court, Ambala; new quarters for the Tahsíldár, Núrpur, Kángra District; protective works for Deputy Commissioner's Court, Dharmsála, and providing additional record accommodation in Deputy Commissioner's Court, Amritsar.

Treasury and Currency Buildings.—A new treasury, with quarters for the guard, in Lahore Fort, has been constructed in order that the Moti Masjid, which has hitherto been utilized as a treasury, might be vacated and maintained as an archæological monument.

Residences for Local Government.—Minor improvements and alterations were carried out both at "Barnes Court," Simla, and in Government House at Lahore. "Barnes Court" was also provided with an electric light installation and a pipe water-supply.

Secretariat Offices.—Some additional accommodation for the Irrigation Secretariat at Lahore was provided.

Monuments and antiquities.—The following works at Delhi were carried out:—Restoration of the Zínat-ul-Masjid and tanks in the compound of Safdar Jang's tomb; inlay work of Jahánára's tomb and special repairs to Shams-ud-dín Tagah's tomb.

Educational.—A new school room for the boys of the Lawrence Military Asylum, Sanáwar, was built and additions made to the Railway Technical School at Lahore. A considerable grant was made from Provincial Funds to cover cost of repairs to the buildings at Bishop Cotton's School, Simla, which had fallen into a bad state of disrepair.

Ecclesiastical.—A monument was put up in the Ráipur Cemetery at Delhi in memory of those officers and men who were killed in the fighting, June to September 1857, and who were buried in this cemetery.

Law and Justice.—A new Divisional Judge's Court at Ambala City and Small Cause Court at Amritsar were built.

Jails.—Many improvements were effected at various jails throughout the Province. A ward for tuberculosis patients was added in the Central Jail, Lahore, and a Judicial lock-up was built at Lyallpur.

Police.—The following works were completed:—House for the District Superintendent of Police at Miánwáli; additions and alterations to Police Stations at Gujrát and Miánwáli; purchasing a building at Kálabágh from the Municipality for use as a Police Station; re-roofing Police Hospital, Rohtak; new Police Office, Lahore; Police Station, Dunera, Amritsar District. The "Parsonage" at Hissar was purchased as a residence for the District Superintendent of Police.

Medical.—A site was purchased for the proposed Boarding House for the Medical College, Lahore.

Veterinary.—Contagious diseases wards were added to the Veterinary College, Lahore.

Miscellaneous.—The following have been completed:—Public Works rest-house at Lyallpur; purchase of two bungalows at Ara in the Jhelum District for use as rest-houses, also a building at Murree for use as a vaccine lymph depôt; re-roofing house purchased in 1901-02 for the Deputy Commissioner's residence at Delhi; additions and alterations to Commissioner's residence, Delhi; 3rd class Civil rest-house at Ránital, Kángra District; 3rd class Public Works Department rest-house at Gházi Ghât, Muzaffargarh District; and a 2nd class Civil rest-house at Saidwála, Montgomery District.

284. The principal works in progress were those required for the new Head-quarters Civil Station of Miánwáli and those at Sargodha, the principal town of the new Jhelum Canal Colony. A number of buildings and new roads were sanctioned for these places, and about three-fourths of the work was finished by the close of the financial year. At Miánwáli—Deputy Commissioner's house, Rs. 19,706; Police lines and hospital, Rs. 58,200; Treasury building, Rs. 11,738; Public Works Department buildings, Rs. 10,213; Civil Surgeon's house and office, Rs. 8,345; additions to dispensary, Rs. 17,602; District Court and Police office, Rs. 1,32,397; Jail buildings, Rs. 1,77,514; station roads Rs. 39,771. And at Sargodha—Colonization Officer's house, Rs. 18,867, and court, Rs. 42,923; Public Work Department buildings, Rs. 13,475; house of Assistant District Superintendent of Police, Rs. 7,000; thána and strong rooms, Rs. 13,339; dâk bungalow, Rs. 9,771; station roads, Rs. 30,734. Works in progress.

In other parts of the Province the works in progress were —

Land Revenue.—Purchasing and repairing the old dispensary building at Luddan in the Mooltan District for use as the Náib Tahsíldár's Court; additions and alterations to the Deputy Commissioner's Court, Jullundur; and the enlargement of the District Court at Montgomery.

Monuments and antiquities.—Restoration of front wall of Jehángír's Tomb, Shahdara.

Educational.—Additions and alterations to the Normal School at Ráwalpindi; slaughter house for the Lawrence Military Asylum at Sanáwar; extensions of the Central Model School, Lahore; certain additions and alterations to the Normal School and Inspector's Office at Mooltan.

Law and Justice.—Metalling roads in the compound of the Deputy Commissioner's Court at Lyallpur; constructing a new Court house for the Additional District Judge and Munsif at Ferozepore.

Jails.—Construction of jail at Lyallpur; increasing the lateral ventilation of barracks and other buildings in the Lahore, Jullundur, Ráwalpindi, Jhang, Siálkot, Hissar and Rohtak Jails; office and gateway in the Hissar Jail; improving the water-supply of the Ambala Jail; additions and alterations to the gateway and office of the Central Jail, Montgomery; and providing quarters for the officials of the Press staff, Lahore Central Jail; temporary huts for 500 prisoners, with four work sheds, and certain extensions of the Mooltan

Central Jail; new judicial lock-up and málkhána at Koranga, Mooltan District; and a lock-up for 20 prisoners at Fort Munro in the Dera Gházi Khan District.

Police.—New Police stations at Jhandánwála and Uttera; 2nd class Police stations at Radaur and Ismailabad, Karnál District; Behuna and Narnaund, Hissar District, and Púnahána in the Gurgaon District; 2nd class Police station at Rámdás, Amritsar District; and Police rest-house at Sinánwán, Muzaffargarh District.

Medical.—The "Manor House" estate at Kasauli was purchased, and alterations were put in hand to render it suitable for the Pasteur Institute, and "Drumbar House," a Public Works property, was being furnished with the same object; certain additions and alterations were made to the Punjab Lunatic Asylum at Lahore.

Miscellaneous.—Residence for a Chaplain at "West Ridge," Ráwalpindi; Civil rest-houses at Dhok-Tallián in the Jhelum District; and at Moch, Chakrála, Jhandánwála, Isa Khel, Sakesar and Piplián in Miánwáli District; office and quarters for Public Works Department sub-divisional establishment at Nagar, Kulu; registration office at Ludhiána; and re-roofing Civil rest-house at Jhajjar, Rohtak District.

COMMUNICATIONS.

Kangra Valley Cart Road.

285. There were some important schemes completed under this head during the year. The Kángra Valley Cart Road improvements have been steadily proceeded with, and this route is now practically a 1st class metalled road, bridged throughout. The last of the bridges along it, which had to be rebuilt, was that over the Dehri stream near Kotla. This was a most interesting old work constructed 30 years ago, and was a great engineering feat of its day. It consisted of four built-up timber arches, 202′ span, carrying a suspended roadway. It has now been replaced by steel girders carried on masonry piers. New well-graded mule roads have been made from Mashobra to Sunni Bridge, 21 miles, and from Narkanda to Kumhársain, seven miles. Both these will improve communications with the Hill States beyond Simla. A new wooden cantilever bridge was thrown across the Beas between Sultánpur and Nagar.

Other works completed.

286. Amongst other less important works completed were the following:—Metalling the sandy portion of the Shekhupura-Pindi Bhattián Road, Gujránwála District; cart stand at Tret and platforms for stacking metal on the Ráwalpindi-Murree Road; Gariála-Gulli-Bagla new road; renewing the superstructure of a bridge in mile 15 of the Ráwalpindi-Murree Road; substituting iron for wooden railings on the approaches of the Leh bridge, Ráwalpindi-Murree Road; new feeder road from Taraki to Domeli; metalling the feeder road from Thánesar to Ládwa town; converting the Pálampur-Baijnáth Road into a 2nd class cart road; covering in springs on the Kálka-Simla Cart Road, so as to protect them from contamination; improving and metalling the feeder road from Batála to Aliwál and from Tohána to Behuna; constructing the southern loop of the Pathánkot-Dunera Road; and reconstructing the bridge at mile 3 of the Hazro-Huttee Road.

Works in progress.

287. The works in progress were—Raising and metalling the following roads, *viz.* the Gujrát-Jalálpur, Lyallpur-Rahu-Khannána, Shahpur-Sargodha, and Chunián-Chánga Mánga; improving gradients in mile 28, Murree-Baracow Road; improving and metalling the feeder road from Sirhind to Morinda and from Morinda to Kuráli; improving and re-aligning the feeder roads from Gulah to Pehowa in Karnál District and from Manak village to Jakhal Railway Station on the Southern Punjab Railway; improving, raising and bridging the Budhláda-Sangrúr Road to the Southern Punjab Railway, and from Muktsar to Malaut; constructing new approach roads to the railway stations at Gill, Ráekot and Chappar on the Ludhiána-Jakhál Railway; a steel rope suspension bridge over the Beas at Oot Behál in Kulu; reconstructing the timber cantilever bridge at Raisan on the Kulu-Lahoul Road; raising the Binwan Khud Bridge on the Pálampur-Baijnáth Road; improving nullah crossings on the Kángra Valley Cart Road; extension of the Mogha-Bágaparána Road to Kot Kapúra Railway Station.

288. Major boat bridges were maintained on the important through lines of communication, and the usual steam ferry continued to be worked over the River Indus at Dera Gházi Khan, under the management of the North-Western Railway. Boat Bridges and Ferries.

Miscellaneous Public Improvements.

289. As stated in the report for the previous year, out of the three hurdle dykes completed two had been washed away, but, in spite of this damage, the benefit has not been small. During the flood season of 1902-03 there was not much erosion of the river bank, and last cold weather the river was well away from where it ran in the cold season before, the bay above the town being to a large extent silted up. The deposit of silt, both up and down stream, was from 10 to 15 feet. At the end of 1902-03 the main stream was running in a straighter line and not inside the bay, as before. All obstructions had been cleared out by the force of the current to the east of the old Bell's Band, and the main stream was impinging direct on the head of the band, but this has been very much strengthened, and it is probable that it will hold, without damage, through this flood season, and if so then the course of the river next cold season may be much better than it has been for some years past. Plans and estimates were completed for increasing the water-supply of Kálka and handed over to the Chief Engineer, Kálka-Simla Railway, for execution, the Local Government contributing Rs. 12,000 towards the scheme, and the balance being found by the East Indian and Kálka-Simla Railways. The Khol Band in the Gurgaon District was completed, and improvements were made to the water supply of the Dhár encamping ground on the Pathánkot-Dunera Road, and certain additions to the retired cantonment and other bands at Dera Gházi Khan. The metalling of certain roads in the Civil Station of Lyallpur was taken in hand, and an experimental deep tube boring, on the air lift system, for raising water was started at Lahore. Dera Ghazi Khan Protective Works.

Contributions.

290. The more important works carried out during the year were :— Works at Lyallpur.

The scheme which provides for the supply of 100,000 gallons of water a day to Lyallpur City and Civil Station was commenced.

The drainage of Lyallpur was practically completed by the end of the year. An almost complete system of street and gully drains has been laid out, and what remains will be treated later on as a separate work.

The other works completed were :—Saragarhi Memorial at Ferozepore; pavements for the grain market at Toba Tek Singh and metalling certain streets at Gojra in the Jhang District; also drainage works at Fázilka.

Those in progress were :—Victoria Jubilee Hospital, Amritsar; providing fittings for the Jubilee Museum, Lahore; additions and alterations to the Town Hall, Simla; improvements to the road between Bajaura and Manglaur in Mandi territory; new well in Samundri, Jhang District; repairs to "Windsor Castle," belonging to the Kashmir State; special repairs to buildings of the Arnauli Estate in the Karnál District and the drainage scheme of Chiniót Road town.

The total grants made for the maintenance of Provincial properties in charge of Local Bodies were Rs. 60,501 to District Boards, and Rs. 3,300 to Municipalities, supplemented by a grant-in-aid of Rs. 24,356 for their engineering establishment. Certain roads belonging to District Boards were also maintained by the Public Works Department at a cost of Rs. 63,996.

Works of Public Utility.

291. The following works of public utility (exceeding Rs. 1,000 in value) were constructed by private individuals from private contributions at a total cost of Rs. 70,975 :— Works constructed by private individuals.

Lahore Division.—A dispensary with medicine, &c., at Batála City by Sardár Maya Singh, Ahlúwália, cost Rs. 6,000. Dharamsála and well with four shops at Háfizabad by Nand Lál, son of Atma Rám, Khatri, cost Rs. 4,000. Resting place for travellers and four shops at Háfizabad by Gurdiál, son of Bálak Rám, Khatri, cost Rs. 2,000. A masonry tank at Kotli Lohárán by Gopál Singh, Arora, Siálkot District, cost Rs. 2,000.

Mooltan Division.—Masonry resting place for travellers at Sitpur, Alípur Tahsíl, by Righu Rám, son of Bhanjan Rám, and Togu Rám, son of Bhoja Rám, Kukrejás, cost Rs. 1,500. A well in the Police Station at Taunsa by Honda Rám, son of Nibáhu Rám, cost Rs. 1,100.

Jullundur Division.—Masonry tank at Mahatpur, Nakodar Tahsíl, by Rái Bahádur Pohlu Mal, late Extra Assistant Commissioner, cost Rs. 12,000. Sarai at Lambra on the Nakodar Road by Bhadáwa Mal, son of Pohlu Mal, and Dalla Mal, son of Badháwa Mal, of Kaliánpur, cost Rs. 3,825. A masonry dharamsála in village Garli of the Dera Tahsíl for the accommodation of travellers, by Rúpa and Bhikha, sons of Badna and Garli, cost Rs. 2,000. A well near village Horwal on the Ispur-Daulatpur Road, by Rái Sáhib Búta Rám, son of Ruldu Rám, Brahmin, of Ghanori in Una Tahsíl, cost Rs. 1,100.

Delhi Division.—Sarai at Kuráli by Harnám Dás and Bhagwán Dás, sons of Ganda Mal, Kalál, of Kuráli, Kharar Tahsíl, cost Rs. 18,000. Dharamsála and well near Railway Station at Thánesar by Lála Bahal Singh, Mahájan, cost Rs. 3,700. Sarái at Shahabad near Railway Station by Sardár Bahádur Jawála Singh of Jharauli, Thánesar Tahsíl, cost Rs. 2,700. Well and rest-house on Kaithal-Siwan Road by Jirám Dás, Mahájan, of Siwan village, Kaithal Tahsíl, cost Rs. 2,200. Well and a dharamsála near village Kasendi by Tej Rám and Lekh Rám, sons of Mohun Lál, cost Rs. 1,400. Village meeting place at Khánpur, Kharar Tahsíl, by Háji Saundhe Khán, son of Najíb Khán, Rájpút, cost Rs. 1,200. Well at Alewa village, Kaithal Tahsíl, by Rudhu Mal, Mahájan, cost Rs. 1,200.

Ráwalpindi Division.—Tank at Dadhucha, Ráwalpindi Tahsíl, by Khudadád Khán, cost Rs. 1,500. Well on the road from Bhera to Chakwál by Guláb Rái, Chopra, son of Pharia Rám, cost Rs. 1,200. Grant of 6¼ acres of land to Mission School at Dalwal, Jhelum District, by Fiázulla Khán, cost Rs. 1,200. Well in the bazár at Gujar Khan, Ráwalpindi District, by Sundar Singh, cost Rs. 1,150.

General Remarks.

Works connected with the Delhi Darbar.

292. In addition to the current work of the year, which was heavier than usual, owing to a more liberal grant of funds, the establishment of the Buildings and Roads Branch of the Public Works Department was called upon to take an important share in the construction works of the Coronation Darbár. The Chief Engineer (first, Mr. Campion, M.I.C.E., and afterwards, Colonel Thurburn, R. E.) was appointed a member of the Central Committee, and was authorized to scrutinize professionally and then sanction all estimates for work which had been approved by the Committee. Rái Bahádur Ganga Rám was appointed as Superintendent of Works, under the Chief Engineer, and was given a suitable staff. The works that had to be done were not only of some magnitude, as may be judged from the total gross expenditure incurred (about 15½ lakhs), but they had to be pushed through with remarkable promptitude, and many of them, such as the great Amphitheatre, the alterations and additions to buildings in the Fort and the building for the Fine Arts Exhibition, presented many novel features and difficulties. The following is a very short epitome of the works actually done by the Public Works Establishment:— Rs. 10,673 were spent on surveys, demarcation of roads and camps and the clearance of the ground. On 41 miles of new metalled road and repairs to existing roads, Rs. 1,81,000 were expended. The water-supply to the Central Camp to the Troops and to the Native Chiefs' Camps, 61 in all, with no less than 100,000 people, cost Rs. 1,06,000. The Amphitheatre, which was roofed in and provided accommodation for 16,000 spectators, in all cost Rs. 2,73,000. The balance of the expenditure was incurred on miscellaneous works, which included Polo grounds, Post and Telegraph offices, interior roads in important camps, and a great deal on ordinary tools and sanitary plant. Of the gross outlay, a large portion, not less than 3¾ lakhs, probably, will be recovered by sale of stores and plant. The decoration of C. S. I. was conferred on Colonel Thurburn, and that of C. I. E. on Rái Bahádur Ganga Ram on the occasion of the celebration of the King's Birthday in India in 1903.

RAILWAYS AND TRAMWAYS.

293. There are no railways in the Province under provincial control. During the year the Northern Section of the Jech-Doáb line from Malakwál to Sargodha in the Shahpur District was opened. This line runs through the new Jhelum Colony. There are no public tramways in the Punjab. The Forest Department have a tramway at Chánga Mánga for the carriage of fuel from the plantation to the railway station. No Provincial railways.

Irrigation.

294. The area irrigated by canals under the management of the Irrigation Department during the year 1902-03 was slightly over $5\frac{1}{2}$ million acres, being an increase of about 200,000 acres as compared with the average of the previous three years. These figures include about 400,000 acres within Native States. The increase of irrigated area is mainly on the Chenab and Jhelum Canals. The distribution of irrigated area between the main canal systems is given below:— Areas irrigated.

Canal.	*Area (thousands) of acres.*
Chenab	1,829
Sirhind	1,112
Bári Doáb	893
Western Jumna	595
Muzaffargarh (Inundation)	300
Upper Sutlej (Inundation)	233
Indus (Inundation)	187
Lower Sutlej (Inundation)	158
Jhelum	138
Chenab (Inundation)	87
Sidhnái	60
Shahpur (Inundation) { Imperial	37
Shahpur (Inundation) { Provincial	27
Ghaggar (Inundation) { Imperial	9
Ghaggar (Inundation) { Bikaner State	5

The total financial results are noticed in the following chapter. The collections of revenue made during any particular year to a large extent depend on assessments made during the previous year, and do not therefore necessarily correspond to and vary in proportion to the areas shown as irrigated during the year.

295. The areas of the year do not include 22,465 acres in the Kharíf and 54,480 acres in the Rabi watered but not assessed because the crops failed. Taking these into account the total area for the year would be 1,906,114 acres; whereas the estimated annual irrigation made in the Project for the year under review was 734,000 acres. The increase over the last year's irrigated area is due to development of irrigation. The Rabi area is the highest on record. The following were the chief works carried out during the year:— Completion of cross spurs near heads of river spurs; remodelling and extending Chiniot Distributary; constructing rest-houses at Kot Barwála and Kot Wassáwa; construction of Sharakpur and Nahra Distributaries from Upper Gugera Branch with their minors; completion of 6 Inspection houses on Sharakpur and Nahra Distributaries; 2 on Bahlak Branch of Tandliwála Distributary and 6 on Khewra and Dhaular Distributaries; extending Nupewála Distributary; completion of remodelling and extending Killiánwála Major Distributary, and certain minors on Khewra and Dhaular Distributaries; completion of Canal Patwárkhánás; remodelling Buralla Branch and Tandliwála Distributary, and the construction of the new Bahlak Branch Distributary; surveys of Sultán Pakhra Distributary, and Bhagat Extensions. Very good progress was made in completing the water-course systems, mainly in the Upper and Lower Gugera Divisions. The Khánki Weir was thoroughly repaired; and Chenáwán Escape remodelled; all channels were maintained in an efficient condition. The net revenue of the year amounted Chenab Canal.

to Rs. 58,11,924 equivalent to a percentage of 21·13 on the capital invested to the end of year, compared with 18·88, the corresponding figure for the previous year. The remissions under Tenancy Rules during the year amounted to Rs. 4,35,284, and allowing 3 per cent. for collection on that sum, the net revenue would, had the above been assessed, have amounted to Rs. 62,34,149 equivalent to a percentage of profit of 22·66 on the capital invested. Taking the assessments of the year into account, and deducting working expenses, but including remissions under Tenancy Rules, the profit amounts to Rs. 68,04,778 and the percentage of profit 24·74. The uncollected balance of assessments amounted to Rs. 1,99,085. The accumulated net profits have increased from Rs. 82,97,643 at the end of 1901-02 to Rs. 1,30,58,994 at the close of the year under reveiw.

Sirhind Canal.

296. The area irrigated in the Kharíf was a little higher than the average of the last six years. The increase was mostly in the Ferozepore Division, and was partly due to want of fodder in the preceding Rabi; this necessitated the growing of large quantities of fodder crops in the hot weather. The Rabi area was below that of the last triennial period; this decrease was due to good rain during September which enabled the cultivators to sow their crops without taking canal water. These crops were matured by rain which fell in January and March. Quarters for subordinates were built at Rúpar and Rámpur, and 50 rest-houses and 45 cook-houses on British Branches at inspection houses; sub-divisional quarters for the Phul Sub-division were completed at Bhatinda and other minor works elsewhere. The expenditure on Maintenance and Repairs, Main Line, was heavy, due to the following works being constructed:—Protection of the left bank of the river above the Khawáspur Spur. Repairs of the Khawáspur Spur. Remodelling of the auxiliary spurs in the Alampur and Mánpur Nullahs. Repairs to the weir. Sheet-piling in canal bed below Siswán Superpassage. Collection of materials for erecting a steel parapet to replace the present down-stream masonry one, on the Siswán Superpassage. Repairs to Training Works in the Budki and Siswán torrents. Needle dams were built at miles 45 and 78, Bhatinda Branch. The profit earned on the British Branches amounted to Rs. 18,93,513 or 7·68 per cent. on the capital invested. In 1901-02 the profit and percentages were Rs. 14,69,677 and 6·0 per cent., respectively. The occupier's rate collected amounted to Rs. 26,66,901 against Rs. 21,35,958 in 1901-02 and Rs. 28,94,201 in 1900-01. The working expenses of this year came to Rs. 8,87,610 against Rs. 8,43,394 in the previous year. The balance of occupier's rate uncollected at the end of the year amounted to Rs. 2,77,496 against Rs. 1,49,837 in the previous year. The accumulation of this balance is chiefly due to the prevalence of plague in the Ludhiána and Ferozepore Districts; so complete realization was impossible. A considerable portion of the balance has since been collected after the expiry of the official year. The collections on Native States Branches amounted to Rs. 13,83,077 or Rs. 6,13,861 more than the previous year, and the assessments Rs. 13,10,197 which is Rs. 11,519 less than in 1901-02. The profit earned by the Native States Branches was 6·41 per cent. by collections and 5·89 per cent. by assessments on the total capital expenditure incurred to the end of the year. The area assessed was a little more than that of 1901-02.

Navigation.—The traffic amounted to 5,597 tons valued at Rs. 2,08,973 as against 4,993 tons and Rs. 1,99,297 in 1901-02. The receipts from tolls were Rs. 5,596 against Rs. 7,020 in the previous year, and as usual were mostly due to rafting. The navigation maintenance charges amounted to Rs. 7,607, resulting in a loss of Rs. 2,011. The loss in 1901-02 was Rs. 607. The number of passengers carried was 15,920 against 16,360 in the previous year and 24,564 in 1900-01. The decrease was due to plague at Rúpar, between which and Doráha Railway Station all the passenger traffic is carried on.

The mean rainfall of the year over the irrigated tract is below the average of the last 19 years by 3 inches in Ludhiána District, 1 inch in Ferozepore and 4 inches in the Native States.

Bari Doab Canal.

297. The total area irrigated during the year is the highest on record, though the area irrigated in each crop has been exceeded on former occasions. The five new rest-houses which were commenced last year have been completed. A new rest-house has also been built at Srihargobindpur on the new Riárki Distributary on the Sobráon Branch. The advanced regulator at Tibri, Kasúr Branch Upper, was further improved by the addition of two bays. Five bridges were built,—three on the Sobráon Branch and two on the Kasúr Branch Lower. Seven minors were constructed. Two travellers have been provided for lifting the 12 undersluices at Mádhopur and the gates of seven bays have been adjusted so as to be operated by them. Several distributaries were remodelled and the outlets readjusted to secure equitable distribution of the canal water to the irrigators. The net income of the year amounted to Rs. 25,19,017, being 12·86 per cent. on the Capital outlay. In the previous year the figures were Rs. 22,00,202 and 11·50 respectively. The balance of occupier's rate which remained uncollected amounted to Rs. 38,203. The new Kharíf Distributaries, Dhardeo, Athwal, and Riárki on the Sobráon Branch were opened for irrigation this year and proved satisfactory. The work of Chak-bandi (or revision of the distribution of irrigation) is complete on old distributaries except in some parts of the 2nd Division. It is still in progress on the new Kharíf Distributaries mentioned above, and on the recent extension of the Rakh, Vahn, and Kahna Distributaries on the Main Branch Lower. The Crown waste lands on these distributaries are being demarcated on the square system ready for colonization. The rain in Gurdáspur District was below the average by 15 inches, in Amritsar District by 6 inches, in Lahore District by 5 inches.

Western Jumna Canal.

298. The total area irrigated was less than the average of the preceding triennium though the rabi area was above the triennial average. The widening of the head of Jundla Branch, Nardak Distributary, and widening of the Butána Canal were completed. Shoals above and below the weir were practically all removed; the remodelling of a vital part of the weir was completed. Protection works on the lower end of the island on the left of the Western Jumna sluices were finished. Some protective spurs in the Somb torrent above and below Dádúpur were added, and several T-headed spurs were put in between Radaur and Indri to train the canal and prevent erosion. Works were completed for protecting Bhílpura village above Dádúpur. Bands in the Chilaundi Swamp—a reclamation work—were repaired. The usual annual system of bands and spurs for regulating supplies in the river for the Eastern and Western Jumna Canals was continued. The band spur across the right channel at Bhílpura was practically completed. The net income of the year amounted to Rs. 14,85,748 equivalent to 8·61 per cent. on the Capital expenditure. In the previous year (1901-02) the corresponding figures were Rs. 12,63,772 and 7·34 respectively. The favourable rainfall in the beginning of the Rabi season of 1902-03 reduced the rabi area put under crops on the Delhi Branch. An abstraction of the winter supply for the Coronation Darbár purposes reduced the supply given to the Hánsi and Sirsa Branches. The receipts during the year amounted to Rs. 90,023 and maintenance charges to Rs. 4,847, showing a profit of Rs. 85,176 as against a profit of Rs. 59,684 in 1901-02 and Rs. 35,370 in 1900-01. The year was one of comparatively small rainfall, and the river was generally lower throughout the season compared with last year. The supply entering the canal during the kharíf was lower than that for any of the five previous years, and this was the case with the rabi supply also except for two years of the five.

Muzaffargarh Inundation Canals.

299. The prospects of the year under report were unfavourable. The snowfall on the Punjab hills having been scanty, the rivers rose late; the canals were therefore cleared from a foot to two feet, deeper than usual at their off-takes, so as to draw a good early supply, and this enabled a large area to be put under kharíf crops, thus bringing the area irrigated up to about the average of the previous triennium. An expenditure of Rs. 4,995 was incurred from Imperial funds on construction of regulators for Surab and Kaure Khán Branches of the Púran Canal. A sum of Rs. 20,053 was spent from Zar-i-nágha funds in the construction of

regulators for distributaries of the Púran Canal, in acquiring land for various diversions, in building a groyne in Jarh Creek and a wooden bridge on Ganesh Canal. From Zar-i-nágha Rs. 56,551 were spent on silt clearances of the Maggi, the Magassan and the Kot Sultán Canals, on which *chher* had been abolished, and on plantations and watch and ward of canals and flood embankments. The working of the canals (based on collections) resulted in a profit of Rs. 2,47,753 against a profit of Rs. 1,73,789 in the previous year. The enhanced profits are due mainly to the more favourable conditions introduced at the recent resettlement of the district. Occupier's rates were introduced from Kharíf 1902 on three of the Indus Canals. Good progress has been made in reducing, by judicious amalgamation, the excessive number of watercourses, as also in providing distributaries with regulating heads. In connection with the Uch Canal project, about 2,700 miles of levelling, along the lines of settlement squares, were completed.

Upper Sutlej Inundation Canals.

300. The area irrigated is considerably below the average of the previous triennium and also below the average of the triennium before that. The decrease was due to the lowness of the river. The principal works done were:— The Dhapai and Malka Hans Distributaries on the Pára Branch of the Lower Sohág Canal were practically completed. The Lakhumalkána Branch of the Hájichand Distributary, Upper Sohág Canal, was made. New rest-houses have been built at Dhulliána, Hujrah and Núrpur. Besides ordinary repairs and silt clearances and re-adjustment of Canal heads, some special repairs were done to two regulators. The year's operations resulted in a profit of Rs. 1,06,742, which is equivalent to 6·27 per cent. on the Capital outlay. In 1901-02 the profits and percentages amounted to Rs 4,14,087 and 25·67 respectively; the falling-off in the profits is due to the unfavourable nature of the season, and partly to the fact that the net revenue in 1901-02 was above the average owing to smaller working expenses and to heavy outstandings having been realized during that year.

Indus Inundation Canals.

301. The irrigated area excluding the area of failed and damaged crops was slightly less than the average of the previous triennium. The year was not altogether a favourable one. The comparatively large rabi crop was solely due to the large area irrigated on the Kutab Canal, which after many years of inefficient working flowed throughout the winter of 1902-03. The Fázalwah, Manka and Chibri in the Northern, Gamu and Sohan in the Southern Sub-Division, worked indifferently. Two rest-houses at Mahtam and Jalálpur were completed during the year. Bridges over the Banuhan Branch and Khánwah Distributary, and a 2·0′ Fall on the Núr Canal, were built. A new head reach for the Islám Branch of the Núr Canal with a head regulator was completed. A head regulator for the Mehrawála was completed and all its outlets built in permanently. The net profit on the year's working amounted to Rs. 79,282 against Rs. 1,40,358 recorded for the previous year. The year was marked by a fortunate absence of strong erosive tendencies on the Indus West Bank. As observed in paragraph 289 the main stream deserted the bay near Cantonments, moved eastward over two miles and finally returned to the west bank at the northern end of Bell's Band.

Lower Sutlej Inundation Canals.

302. The area irrigated excluding damaged and failed crops is about the same as the average of the preceding triennium. The large proportion of failed crops during kharíf was due to the exceptionally low supplies in the river during June and July 1902. The year was an exceptionally bad one. The canals began to flow very late and the supplies were abnormally low during June and the first week of July, and for the remainder of the season also the supply in the river remained much below average. But owing to the very favourable river heads of the Mailsi and the Mohamedwah Canals, these channels remained in flow till the middle of November 1902. For this reason, as well as on account of the much better regulation and distribution of supplies owing to the introduction of the various schemes of improvement, the Rabi crop was decidedly above average, whilst the Kharíf crop also, though considerably below average, was not so bad as it would otherwise have been in such an abnormally bad year as 1902 proved to be. The original scheme for amalgamating the Jámwah Kalán and Baháwalwah Mailsi Canals with Díwánwah and Jámwah Khurd was

completed during this year, and the amalgamated main canal was designated the Mailsi Canal. An auxiliary head reach about six miles in length was also excavated for the Mahomedwah Canal. A double regulator and one fall were built, and alterations to two other double regulators were carried out during the year. A new inspection house at Sadda was built. The working of the canals resulted in a profit of Rs. 11,226 against Rs. 1,00,684 in the previous year.

303. The area irrigated during the year was 138,911 acres as compared with 65,367 acres in the previous year. Most of this was free of charge, and the rest was only assessed at half rates. The head-works were practically completed. The floor between the Regulator and Divide Groyne was paved. The spur upstream of the weir to divert the river to the left bank was strengthened and maintained, and did good work. There were no floods of any consequence during the year under review. The portion of the Main Line remaining unfinished last year, and consisting of one-third the width in the first six miles, was completed. The Central Jail at Múng Rasúl was broken up at the end of the year and the prisoners who had been employed on the excavation were removed. The excavation of the Southern Branch and Southern Feeder was completed, and most of the earthwork in the channel excavation of the Chenab Khádir Escape was taken out. The excavation of Northern Branch, Sulki Feeder and Sulki Escape (with the exception of the arrangements for crossing the Sáhiwál Inundation Canal) was completed. The masonry works on the Main Line and Southern Branch were finished. On the Chenab Khádir Escape eight bridges were in progress. On the Northern Feeder all the bridges and falls as far as R. D. 138,000, were finished during the year except the District Board Bridge for the new station at Sargodha, which was begun. Construction of Government buildings at Sargodha was begun and well advanced. Quarters for two Executive and three Assistant Engineers with the necessary out-offices, a Revenue Office, Telegraph Office, Canal Rest-house, Workshops and Godowns were all well in hand. All roads were also laid out. Telegraph Offices and Be'dárs' quarters were built at Wán and Gullahpur on the Southern Branch. Three rest houses on this branch were also completed. On the Northern Branch a Telegraph Office and Beldárs' quarters at Satgarha were finished. Regulating gear for Northern Branch head was erected. A third inspection house with out-houses, telegraph office and subordinates' quarters was half completed on the Northern Feeder, and six inspection houses on the distributaries were in hand. Masonry works on the extension of No. 4 Right Distributary were completed and the earthwork was well in hand. The water-courses of Nos. 4 and 5 Right Distributaries were completed and opened for irrigation with the exception of a few in old villages. On the Southern Branch the excavation of the large distributaries Nos. 6 Right and 7 was practically finished, and some of the minors were in hand. On the Southern Feeder Nos. 1 to 5 were all practically completed. On the Northern Branch the earthwork of Nos. 1, 2 and 4 Right and Nos. 2 and 3 Left was completed during the year; as also the masonry works of 4 Right and its minors and of Nos. 1 and 3 Left and on other minors. The water-courses of Nos. 1 and 3 Right were completed both in Crown waste and in old villages. On No. 2 Right those in new villages were completed. On Nos 1, 2 and 3 Left water-courses in new villages had been completed. On the Sulki Branch water-courses for one minor were nearly completed. On the Northern Feeder water-course schemes for four distributaries were nearly completed. Most of the new villages on No. 4 Right, Main Line, were allotted. And on the Northern Branch, most of them under Nos. 1, 2, 4 and 5 Right. A large tract of land near Monah has also been given out to the Remount Department for a depôt. The direct expenditure incurred during the year by this Department on the canal works proper amounted to Rs 19,58,103, and with the indirect charges brought up the expenditure debited against the project at the end of the year to Rs. 1,14,68,942. The gross revenue realized during the year was Rs. 37,810 and the working expenses amounted to Rs 1,49,840, resulting in a deficit of Rs. 1,12,030 or 0·98 per cent. on the capital outlay to end of the year. **Jhelum Canal.**

304. There was a large decrease of irrigated area compared with the average of the last triennium. The decrease is due to the low supplies in **Chenab Inundation Canals.**

the river Chenab. The canals opened late and ceased to flow early. The expenditure was incurred chiefly in the remodelling of the Daurána Langána Canal, alterations to Hanjanwáhi Bridge and additions to Adhi Bágh and Binda Inspection Houses; also in paying compensation for land taken up in connection with the amalgamation of Sikandarabad and Gajjúhatta Canals. The working of the canals showed a net profit of Rs. 29,261 against Rs. 41,045 during the previous year.

Sidhnai Canal. 305. There was a large drop in irrigated area compared with the average of last triennium. The decrease in irrigation is due to late arrival of water at Sidhnái and to its failing early. The extensions of the Ráwan, Kakarhatta and Munganwála Distributaries of the Sidhnái Canal were completed. Expenditure was also incurred in building a needle dam below the head of the Hithár Distributary and in remodelling the Koranga Canal. The remodelling of the Sidhnái Canal was completed. The year was a very unfavourable one. The net profit wasRs. 51,054, which is equivalent to 3·95 per cent. on the Capital outlay, against a profit of Rs. 3,13,529 and 24·5 per cent. for the preceding year.

Shahpur Imperial Canals. 306. The irrigated area was above the average of the preceding triennium. The construction of the new Regulating Head for the Western Station Canal was completed. A considerable amount of work was done in constructing bands and clearing creeks to run water in the Inundation Canals in the cold weather. The receipts amounted to Rs. 1,01,613, and the profit earned amounted to Rs. 51,191, which is equivalent to 23·70 per cent. on the Capital outlay. The profit and percentage in the previous year were respectively Rs. 51,371 and 24·28.

Shahpur Provincial Canals. 307. The irrigated area was above the average of the preceding triennium. A considerable amount of work was done in constructing bands and clearing creeks to run water in the Inundation Canals in the cold weather. The receipts were Rs. 53,779, and the profit amounted to Rs. 14,449 as against Rs. 11,994 of the previous year. The supply in the river was not good and the rainfall was deficient. For this reason a large area of crops failed and heavy remissions had to be made.

Ghaggar Inundation Canals. 308. The year was one of exceptional drought, and the river was generally low throughout the season. Water came down the Ghaggar at about the usual time, *viz.* the third week of June, but it came in such small quantities that it took 15 days for the lake to fill up. Owing to the scanty rainfall the irrigated area was lower than in 1901-02 and only about ⅓rd of that irrigated in 1900-01. The following works were completed during the year:—Building outlets on Distributaries; and Low Level Minor from the Northern Ghaggar Canal. The total Capital outlay to end of 1902-03 under Imperial and Contributions amounted to Rs. 3,42,546 and Rs. 2,84,223 respectively, against Rs. 3,50,689 and Rs. 3,17,247 respectively sanctioned in the Revised Project Estimate. No water-rates have yet been sanctioned for the Ghaggar Canals. This account therefore shows only outlay incurred during the year on extending and pitching at head of canals and Maintenance and Repairs, &c, which amounted to Rs. 26,366 under Imperial and Rs. 11,211 under Contributions.

Upper Chenab Canal Survey. 309. A new Division for this work was formed in January, men and instruments collected, and the alignment and levelling of base and cross-section lines put in hand. By the end of March 2,985 miles had been laid out, surveyed and levelled. A survey of the River Chenab for head works near Pul was completed. The expenditure under Capital amounted to Rs. 22,691 direct and Rs. 713 indirect, making a total of Rs. 23,404.

Upper Jhelum Canal and Woolar Lake Scheme. 310. New Survey Sub-Divisions were formed for the purpose of carrying out detailed surveys for the Upper Jhelum Canal and of the Woolar Lake in Kashmir. By the end of March 1903 considerable progress had been made with the surveys for the Upper Jhelum Canal.

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications :—

(*a*) DEPARTMENTAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1901 to 30th September 1902.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the year 1902-03.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1902-03.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the year 1902-03.

Stamps.—Report on the Administration of the Stamp Department of the Punjab for the year 1902-03.

Income Tax.—Punjab Income Tax Report for 1902-03.

Forests.—Progress Report on Forest Administration in the Punjab for 1902-03.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1902-03.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1902-03.

(*b*) FINANCAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, TENTH ISSUE.

Salt.—Tables III 11 and 12.

Excise.—Table V 12.

Stamps.—Tables VII 22 to 24.

Income Tax.—Tables VIII 2, 3, 6 and 7.]

Gross Revenue and Expenditure.

Introductory.

311. The receipts and expenditure brought to the credit and debit of the Punjab during the year 1902-03 are for the Province as reconstituted from the 9th of November 1901. The previous year's accounts included the transactions of the districts now comprised in the North-West Frontier Province from the 1st April to 8th November 1901, which have been eliminated in comparing the figures of the two years.

Revenue raised in the Province.

312. The revenue raised in the Punjab and controlled by the Local Government consists of the income of all Civil Departments except the Railways, Post Office, Telegraph and Salt Departments. A small local revenue derived from tonga dâk service is classed as Post Office revenue, but postal receipts in general are Imperial, and with the income of the Railways and Telegraphs will be left out of account in the present review of the revenue yielded by the Province. The income of the Salt Department, though not controlled by the Local Government, is essentially revenue raised in the Province. Irrigation revenue, though an Imperial head of account, is controlled by the Local Government. The income of Municipalities is not incorporated with the public accounts shown in the next two paragraphs, and will be dealt with separately under the head of Municipal Funds in paragraphs 377-382.

Details of revenue.

313. The revenue raised in the Province during 1902-03 is made up as follows, last year's figures being quoted for comparison :—

Source of revenue.	1901-02.	1902-03.
	Lakhs of rupees.	
Land Revenue	255·13	230·54
Irrigation (excluding land revenue due to canals)	144·88	159·15
Salt	64·55	67·02
Local Rates	46·27	40·61
Stamps	38·33	39·50
Excise and Opium	25·66	27·48
Income Tax	14·33	14·58
Forests	14·26	15·86
Police	7·00	7·01
Civil Works	6·00	6·22
Interest	3·28	2·49
Law and Justice	3·03	2·07
Tribute	2·89	3·07
Jails	2·38	1·88
All other items	11·22	12·60
Total Receipts	639·21	630·98

The head "Irrigation" both in this and the following paragraph includes not only those canals managed by the Irrigation Department, but also those under the management of the Civil Department. The receipts under the various major revenue heads will be separately noticed in the following paragraphs.

Expenditure.

314. The expenditure, excluding expenditure of the Military, Railways, Post Office (Imperial) and Telegraph Departments, Municipal expenditure and Capital expenditure on canals amounted to 340 lakhs in 1902-03. The detailed items, with corresponding figures for the previous year, are given below :—

Departments.	1901-02.	1902-03.
	Lakhs of rupees.	
Irrigation	58·73	62·64
Public Works	40·95	48·44
Land Revenue	35·53	38·65
Police	34·52	37·72
Law and Justice	32·42	33·15
Medical	14·89	17·88
Education	14·27	15·62
General Administration	12·82	13·54
Superannuation Allowances and Pensions	12·38	12·77
Jails	10·57	10·25
Forests	9·14	9·60
Political	8·36	7·10
Stationery and Printing	5·31	4·79
Salt	3·84	3·66
All other items	19·26	24·63
Total Expenditure	313·09	340·44

Land Revenue.

What the figures include.

315. The land revenue or agricultural year does not correspond with the financial year. The former ends on 30th September ; the latter on the 31st March

following. The land revenue collections for the year ending 30th September 1902 have been reviewed in Chapter II. The explanations there given, *viz.*, scanty rainfall, poor harvests and heavy remissions, apply equally to the collections for the financial year which ended on the 31st March 1903, and account for the decrease of 24·59 lakhs shown in paragraph 313. The Government of India allowed for a remission of 39·30 lakhs in the budget of 1902 03 as already explained. The collections include 24·94 lakhs on account of land revenue due to irrigation for which the Irrigation Department takes a book credit as indirect income. The expenditure (38·65 lakhs) shown against Land Revenue includes 12·60 lakhs debited to the Patwáris' Fees Fund. The income of this fund is credited in the accounts under the heading "Provincial Rates".

Irrigation.

316. The capital expenditure to the end of 1902-03 on all canals in operation, excluding those under construction, was as follows:— Capital Expenditure.

	Lakhs.
Major Works	1034·61
Minor Works (Imperial)	13·02
TOTAL CAPITAL INVESTED IN CANALS ...	1047·63

Of this sum 37·34 lakhs were spent during 1902-03. The excess, 20·98 lakhs over the previous year's outlay, is due to the transfer of the Jhelum Canal from the head "Canals under construction".

317. The income realised during the year was— Income.

CLASS OF WORKS.	DIRECT INCOME.	INDIRECT INCOME.	TOTAL.
	Lakhs of rupees.		
Major Works	150·73	15·06	165·79
Minor Works (Imperial)	7·60	9·79	17 39
Ditto (Provincial)	·46	·09	·55
Ditto (Local)	·36	...	·36
TOTAL	159·15	24·94	184·09

318. The expenditure (other than capital and interest) on canals was as follows:— Working expenses.

	Lakhs of rupees.
Major Works...	48·23
Minor Works (Imperial)	13·47
Ditto (Provincial)	·52
Ditto (Local)	·42
TOTAL ...	62·64

319. The net revenue derived from major canals was 117·56 lakhs, being 11·36 per cent. on the capital of 1034·61 lakhs. Interest on the capital amounted to 38·91 lakhs, so that the net profit after paying interest was 78·65 lakhs as compared with 68·99 and 65·22 lakhs in 1901-02 and 1900-01 respectively. Net Revenue, Major Works.

320. The net revenue from Imperial Minor Works amounted to 3·92 lakhs as against 8·48 lakhs in the previous year. The great difference between the results of the two years is due chiefly to the fact that the figures for 1901-02 include the profit earned by the Upper Sutlej Series of Inundation Canals, which has now been transferred to the category of Major Works. Net Revenue, Imperial Minor Works.

Provincial and Local Canals.

321. For Provincial and Local Canals capital accounts are not kept. The Shahpur Canals under the management of the Irrigation Department yielded a profit of Rs. 14,000 as against Rs. 12,000 in the previous year. The Local Canals worked at a deficit of Rs. 6,000, owing to a scanty supply of water in the Gurgaon and Montgomery Canals, and to the expenditure of Rs. 14,000 in Karnál on the widening of the Sarsuti Canal.

Opium and Excise Revenue.

Gross Excise Receipts.

322. In the Punjab there is no separate Opium Department. The taxation of liquors, opium and drugs is the concern of the Department supervised by the Commissioner of Excise. The revenue of the year is here compared with that of the year 1901-02—

	1901-02.	1902-03.
	Rs.	Rs.
Spirits	15,07,752	16,20,325
Beer	1,21,572	1,29,674
Drugs other than opium	2,84,130	3,21,125
Opium	5,90,345	6,03,544
Miscellaneous	800	571
TOTAL	25,04,599	26,75,239

Excise Expenditure.

323. The charges have been Rs. 90,778 compared with Rs. 82,667, and the excess of Rs. 8,111 arose from increased expenditure under "Travelling Allowance, &c" "Rewards," "Refunds," and in connection with the Special Agency for prevention of smuggling of Málwa opium, which, however, was disbanded at the end of the year.

Variation in receipts from licenses to vend imported spirits and liquors.

324. The receipts from licenses to vend imported liquors have increased by about Rs. 10,000 to Rs 88,952, the difference arising from appreciable increases in a number of districts. As this head of receipts includes fees determined by auction in the case of many, if not most, licenses granted in bazárs, as well as fees fixed by scale, it may be presumed that the increase accrued principally from the auction fees, as the fees fixed by scale do not ordinarily vary much. The receipts from licenses to vend Indian spirits, the fees for which are all determined by auction, show a rise of Rs. 52,533, which is not a remarkable variation in respect of this very mutable head of receipt. Only Rs. 2,760 of the total of Rs. 6,06,175, shown under this head, accrued from fees for wholesale licenses.

Variation in still-head duty.

325. The receipts from still-head duty were Rs. 9,19,371, showing a rise of Rs. 50,073. The total under this head includes Rs. 26,477, the duty taken upon issues to the North-West Frontier Province.

Receipts from out-stills.

326. Rs. 1,130 were received in respect of shop-rents and distilling fees paid by distillers at the three out-stills which exist in the Province.

Receipts from mall liquors.

327. The receipts from duty upon beers, issued from the Provincial breweries, were Rs. 1,29,674, showing a rise of Rs. 8,102, indicating that 129,632 more gallons of beer were issued. The difference is probably accounted for by the return of troops from South Africa. The number of breweries in the Province (8) remains the same as last year.

Distilleries.

328. There were 6 licensed private distilleries and 2 State central distilleries* at work during the year. Sanction to the closure of the two latter was received after the year ended, and arrangements for closing them are, at the present moment, being completed. In 1897-98 there were 17 State enclosures in existence, but they have been successively closed during the last five years; and, with the closure of the Ferozepore and Kángra enclosures above mentioned, the last of the State distilleries will disappear. The supply of the Province will thus be left entirely to the licensed private distilleries, which, from 6 in number will shortly be reduced to 5, as the management of the distillery at Mooltan have tendered resignation of their license, having found Mooltan so far distant from cane-producing districts as to prevent distilling there being a financial success. If the Simla distillery, which principally produces barley malt whiskey, is also excluded from consideration as far as the supply of the masses in the

* Namely, the distilleries at Kángra and Ferozepore.

Province is concerned, it will be seen that the supply of the Province is left to the 4 distilleries in the plains which are situated at Karnál, Amritsar, Sujánpur (Gurdáspur) and Ráwalpindi. These 4 distilleries have sufficient still-power to supply the Province, and no idea is entertained in the Excise Department of considering the grant of any fresh licenses, because the question really is whether the business of supply (amounting on the average to 220,000 proof gallons of issues) can support 4 distilleries. The business is of course increased by the supply (averaging 23,000 proof gallons) to the Commissariat, and has been slightly increased by annual deliveries (averaging 12,000 proof-gallons) to the Jammu State under contract, but there seems little prospect of any extension of business by exports to other Provinces of British India.* On the other hand, business is somewhat reduced by the exports from the Rosa Distillery (averaging 49,000 proof gallons) into the Province. However, the whole field is now being thrown open to the private distillers, and time alone will show whether 4 distilleries is too large a number or not.

Quantity of spirits issued.

329. The grand total of issues from the 8 distilleries which were at work during the year amounted to 260,697 proof gallons, in which are included 18,482, 6,869 and 6,300 gallons issued respectively to the Commissariat, the North-West Frontier Province and the Jammu State. The quantity therefore issued for sale, in the Punjab proper, was 229,046 proof gallons. To the foregoing figure must be added the 58,009 gallons imported from Rosa, if the quantity distributed for sale in the Province is to be arrived at. This figure being added, the total of 287,055 proof gallons is found to have been distributed. Some of this remained over in vendors' hands, no doubt, at the end of the year, but the figure will be the best indication of the amount of spirit consumed by the 20 millions of the Province, exclusive of such amount of imported spirits which some classes of that population consume.

Liquor prosecutions.

330. There have been a good many more prosecutions for illicit distillation than in 1901-02, and there were one or two successful raids upon notorious villages during the year.

Acreage duty on poppy cultivation.

331. Acreage duty declined by some Rs. 3,000 to Rs. 20,438 consequent upon a decline in cultivation by 583 acres. This total of duty spread over the outturn (1,143 maunds) gives an incidence of about 7 annas per seer, which is at present the only equivalent for a quantitative duty upon the opium produced in the Province.

License fees (Opium).

332. License fees remained fairly steady at Rs. 4,12,713. The receipts under this head seldom vary much, as the same contractors repeatedly take vend monopolies within specified areas, such as whole tahsíls or recognised circles within tahsíls, and in some cases whole districts.

Duty on Malwa opium.

333. The duty taken at Ajmer upon Málwa opium allowed to be removed into the Province at the reduced rate of duty (Rs. 280 per chest or Rs. 4 per seer) increased by Rs. 4,760 to Rs. 85,960 consequent upon the imports (522 maunds) being greater by 29 maunds than in the previous year. The local outturn in the Province itself was less by 596 maunds.

Duty on opium other than Malwa opium.

334. The duty taken (Rs. 2 per seer) upon opium introduced from the Simla Hill States and Kashmir fell by Rs. 9,892 to Rs. 24,891 consequent on the imports (311 maunds) being 124 maunds less than in the previous year. It seems that the poppy crops in the Hill States were not good ones, just as was the case with the crops in the Punjab plains, and there was evidently less stock to export into the Punjab.

Revision of opium arrangements.

335. Proposals for the revision of the opium arrangements in force in the Province are under consideration.

Sale of Excise opium.

336. The receipts from gain on sale proceeds of Excise opium increased by Rs. 7,747 to Rs. 59,542 consequent on the sales from treasuries (215 maunds) being greater by 30 maunds than in the previous year.

Amount of opium sold retail.

337. The amount of opium sold retail was 52,294 seers (or 1,307 maunds) compared with 52,798 seers (or 1,320 maunds), which shows that, although

* The transports to the N.-W. Frontier Province have only accidentally become exports, owing to the recent separation of that Province from the Punjab.

considerably less stock came into vendors' hands owing to the bad season, the stocks were ample for the requirements of the Province. Considerable stocks are always held up by dealers.

Opium prosecutions.

338. The number of prosecutions under the Opium Act were about the same, namely 100. A blow was struck at illicit introductions from the Malákand through Nowshera to the village of Hazro, in the Attock Tahsíl, by the conviction of two brothers who had for a long time been doing a brisk business in smuggling.

Charas license fees.

339. Although the actual licenses for vend of *charas* and for vend of *bhang* are granted as separate documents, joint bids for the monopoly of vend of either article at any one place are taken at the auctions. Thus the total of Rs. 1,62,512 shown under the head "License fees" covers the fees for both *bhang* and *charas* without discrimination. The figure is much the same as in the previous year, differing by only Rs. 3,981 in excess.

Import duty (charas).

340. The import duty on *charas* has risen by Rs. 26,810 to Rs. 1,48,213. As the import duty is not levied on the border, but is levied, in postponed fashion, when the *charas* is removed from any warehouse to vend premises (the stocks meanwhile lying in the warehouses in bond), the variation in duty does not depend upon the quantities actually imported from Leh, but upon the amount passing duty-paid into the hands of the trade. The Government of India have approved the doubling of the duty on *charas*, which it is proposed to give effect to from the 1st of April 1904; but meanwhile the question has arisen whether the duty should not be trebled (*i.e.*, raised to Rs. 6 per seer) in order to keep abreast with the duty in the United Provinces, proposals for raising which to Rs. 6 from October-November next have been made.*

Duty on bhang.

341. There is a satisfactory rise to notice in the duty on *bhang*. Receipts have increased by Rs. 5,374 to Rs. 7,906.

Prices of bhang.

342. The great variations which appear in the wholesale price of *bhang*, when the quotations of certain districts are compared with those of the majority of districts in the Province, are due to the fact that in the one case the untaxed price, and in the other the taxed price, of the article is denoted. For instance, Ambala, Hoshiárpur, Jullundur and Gurdáspur show a price of not more than Re. 1-8-0 in comparison with prices of Rs. 6 to Rs. 9 in other districts. The explanation is that the prices in the districts named refer to the spontaneous produce, which remains untaxed as long as it is not removed from the district of origin, but upon removal, after being subjected to the transport duty of Rs. 4 a maund, such produce is quoted at a proportionately high price in the districts receiving it. The retail price of *bhang* varies for the same reasons as have been mentioned above. For instance, in Ambala and Hoshiárpur, 8 to 10 seers may apparently be got for a rupee, while in Mooltan only 14 chatáks can be got.

Prosecution (hemp drugs).

343. The number of cases in connection with these hemp drugs was 50 compared with 43, 47 persons being convicted, of whom 32 were merely fined and 15 received imprisonment.

Salt Revenue.

Control of Department.

344. The Salt Department in the Punjab is not under the control of the Local Government. It is administered by the Commissioner, Northern India Salt Revenue, from whose report the following information is taken.

* The sanction of the Government of India to the raising of the duty on *charas* to 6 rupees per seer has since been received.

Income and Expenditure.

345. There are three sources as detailed below from which salt is obtained in the Punjab. The income and charges connected with the issue of salt were as follows:—

Statement of Receipts and Charges of the Punjab Salt Mines for the years 1901-02—1902-03.

	Receipts.		Charges.	
	1901-02.	1902-03.	1901-02.	1902-03.
	Rs	Rs.	Rs.	Rs.
Cis-Indus and Kálabágh Mines	62,47,699	65,13,769	2,84,675	2,68,353
Mandi Mines	43,509	40,367	5,909	4,079
Sultánpur Salt Works	1,63,506	1,48,190	13,434	13,632
Amount paid to Bahawalpur	...	...	80,000	80,000
Total	64,54,714	67,02,326	3,84,018	3,65,064
Deduct charges	3,84,018	3,66,064	...	...
Net Revenue	60,70,696	63,36,262	...	...

Cis-Indus and Kalabagh Mines.

Sales and issues.

346. The trade of these mines continued to improve. Maunds 2,556,951 of salt were sold last year compared with maunds 2,426,378 in 1901-02, the increase amounting to maunds 130,573. On the 31st December 1902 the sales were in excess of those of the corresponding period of the previous year by maunds 74,119, but the rumours of a reduction of duty reduced this excess to maunds 37,632 by the 22nd of March 1903. The reduction of the duty then became known, and a rush for salt occurred, maunds 158,483 having been sold during the last eleven days of March. The trade of the minor depôts was practically stationary, and the large increase which occurred was mainly confined to the sales of salt from the Mayo Mine, the trade in which forms 89·42 per cent. of the total transactions of the Division. The arrangements for the issue of the Mayo Mine salt at the Warthganj Depôt are very efficient, and the issues of salt at the Cis-Indus and Kálabágh Mines generally keep pace with sales. As a result, however, of the rush for salt after the reduction of the duty, a balance of maunds 111,000 remained uncleared at the close of the year compared with maunds 34,544 only at the end of 1902-03. The total quantity of salt issued during the year amounted to maunds 2,480,495 compared with maunds 2,448,270 in 1901-02.

Territorial distribution of trade.

347. Maunds 1,987,508 of salt were booked to the cis-Indus portion of the Punjab (including the Feudatory States), Kashmir, and the Hazára District of the North-West Frontier Province compared with maunds 1,944,153 in 1901-02, which shows an increase of maunds 43,355. The bookings to the trans-Indus country were also larger by maunds 7,000 (maunds 7,620 against maunds 620) and to Sind by maunds 3,677 (maunds 24,733 against maunds 21,056). The consumption of the rock salt of this Division in the country trans-Indus is probably larger than appears from the figures, as it is believed that some of the salt consigned to stations on the railway running along the Indus passes across that river, and that salt from Kálabágh declared for Sind by the river route is often sold in marts on the west bank for consumption inland. The consignments to the United Provinces (maunds 321,723 against maunds 344,225) and to the Province of Behar in Bengal (maunds 136,680 against maunds 136,880) fell off by maunds 22,502 and maunds 200 respectively. Indents, however, for maunds 19,875 for the United Provinces and maunds 2,640 for Behar, which were sent in after the reduction of the duty, were awaiting clearance when the year ended. The decrease in the trade was therefore more nominal than real, but it is a matter for regret that this salt does not find more favour in the United Provinces of Agra and Oudh. There was an improvement of maunds 250 in the trade with British Balúchistán; and small quantities of maunds 320, 300 and 25 were booked direct to Lower Bengal, the Central Provinces and Central India respectively.

Excavation of salt.

348. The total quantity of salt excavated in the mines of the Division during the year amounted to maunds 2,518,014 compared with maunds 2,429,797 in 1901-02, and there was an available balance of maunds 424,729 in stock at its

close. No change was made during the year in the rates paid to the miners, namely, 10½ pies a cubic foot in the Mayo Mines, Rs. 3-12-0 per 100 maunds at Warcha and Núrpur, and Rs. 4-2-0 per 100 maunds at Kálabágh. The average outturn of salt in the Mayo Mine per 100 cubic feet of salt excavated during the year was 140 maunds compared with 135·69 maunds in 1901-02; and the average cost was Rs. 3 14-6 per 100 maunds against Rs. 4-0-5·83 in the previous year. The improvement in the outturn was owing partly to the salt excavated during the year having been of particularly good quality and partly to the introduction of more stringent arrangements to prevent waste at the Warthganj Depôt. Traders are usually unwilling to receive small lumps or pieces of rock salt, and much salt of excellent quality was in consequence rejected in former years and went to swell the large accumulation of waste salt and marl that exists at the depôt. The minimum size or the pieces of salt issued to the trade has been gradually lowered, and unnecessary waste has been to some extent prevented.

MANDI MINES.

Sales and issues.

349. The sales and issues of salt at the two quarries of Gúma and Drang amounted to maunds 129,862 compared with maunds 139,230 in 1901-02, and a decrease therefore occurred of maunds 9,368. Sales were better than those of the previous year down to December 1902, but commenced to decline in January 1903 and continued to do so down to the close of the year. The falling off appears to have been due mainly to the severity of the latter part of the winter; snow fell repeatedly during January and February, and there was much hail and rain in March. Some of the salt too, which was issued from the Gúma quarry during the last two months of the year, is said to have been of a quality inferior to the ordinary produce of the mines.

Distribution of trade.

350. The falling off in the trade was about equally distributed between British territory and Native States. The quantity of salt consigned to British territory was maunds 67,674 against maunds 71,946 in 1901-02, a decrease of maunds 4,272. Traffic with the Káhgra Valley and the Simla District was fairly well maintained and fell off only slightly, but consignments to Kulu were smaller by maunds 3,365 (maunds 18,545 against maunds 21,910). It is probable that stocks had accumulated in Kulu in consequence of the large imports of 1901-02, as the imports of the three previous years were 18,186, 18,486 and 17,595 maunds, respectively. Trade with Native States decreased by maunds 5,096 (maunds 62,188 against maunds 67,284). There was a falling-off of maunds 6,038 in the bookings to the Mandi State, but elsewhere the differences were not large.

Excavation of salt.

351. The demands of the trade were fully met from the quarries during the year. Some difficulties in connection with excavation were experienced at Gúma, where there was danger of the workings being buried under landslips, and a new quarry had to be opened. A tramway was laid down at Gúma during the year by the State officials to facilitate the removal of débris from the quarries. Subsequently the line was utilised for the carriage of salt from the quarries to the depôt. The construction of a tram line at Drang has also been undertaken.

Export of Mandi salt into British territory.

352. The remarks in the Report for 1901-02 about the increased consumption of Mandi salt in the Kángra District and the attempts made by the Mandi State officials to force the export of salt into British territory were made under a misapprehension. The year 1900-01 was a bad one for Mandi salt, the decrease in the sales having been due in part at any rate to bad administration at the quarry. The sales in 1901-02 for British districts amounted to maunds 71,946 compared with an annual average of maunds 71,344 for the three years ending with 1899-1900, and the sales for Native States were maunds 67,284 compared with an annual average for the same three years of maunds 54,751. The increase in sales, which took place in 1901-02 compared with the four preceding years, was therefore practically confined to the sales for Native States. When proposing in January 1900 the appointment of Inspectors with charge allowances, instead of a Superintendent and Inspectors without allowances, to hold charge of the quarries, the Commissioner of Salt Revenue said that it was quite possible that the more economical arrangement would prove to be

the more efficient one. Inspectors with charge allowances were appointed to hold charge in July 1901, and the registered sales in 1901-02 were larger than they have been for nine years. It is probable. however, that in future the reduction of the duty on cis-Indus rock salt will enable this salt to push back Mandi salt in all markets which are within reasonable distance of the railway, as the reduction in the cost of Mandi salt is not proportionate to the reduction in the cost of the superior article. Mandi methods of administration also are not calculated to develop the trade. All head load men visiting the quarries are required to do a day's work there without payment. Attempts therefore are made to prevent local salt traders from buying salt and retailing it in villages from which head load men would be likely to come. The effect (if any) of the reduction of the duty will appear in the next two or three years.

SULTANPUR SALT WORKS.

Sales and issues.

353. There was a further decline in the trade of the Sultánpur Salt Works. Maunds 59,353 of salt were sold compared with maunds 64,989 in 1901-02, and the falling off in the trade amounted to maunds 5,636. Sales were affected adversely by the Imperial Darbár at Delhi, as carriage for the removal of salt by road was difficult to obtain, and the booking of goods over the railway line *viâ* Delhi, the only outlet for the rail-borne traffic of these works, was temporarily suspended. The works, however, appear to be doomed. The issues amounted to maunds 58,702 against maunds 65,520 in the previous year, a decrease of maunds 6,818. The uncleared balance at the end of the year was maunds 1,052 compared with maunds 402 at the end of 1901-02.

Distribution of trade.

354. The falling off in the quantity of salt issued for consumption occurred principally in the local trade with the part of the Punjab in which the works are situate. The trade by rail with the United Provinces was fairly well maintained.

Manufacture of salt.

355. 35 factories were worked during the year, and maunds 64,022 of salt were added to stock compared with maunds 64,105 in 1901-02. There was a balance of maunds 7,344 in stock, and this was sufficient, as manufacture was proceeding when the year closed. The season was a good one for manufacture and the produce was of fair average quality. Remunerative prices were obtained by the manufacturers for their salt. Maunds 15,459 were sold at varying rates from six annas and upwards a maund, maunds 15,430 at from five annas to under six annas, maunds 23,670 from four annas to under five annas, maunds 4,594 at three annas to under four annas, and only 200 maunds at less than three annas.

Stamp Revenue.

Receipts and Charges.

356. The intermediate annual report of the Stamp Department for 1902-03 shows that the gross receipts and charges amounted to Rs. 38,95,530 and Rs. 2,04,934 as against Rs. 37,76,922 and Rs. 2,00,966 respectively in the previous year. The charges exclude the cost of general supervision. The net income was Rs. 1,15,000 in advance of that of 1901-02.

Judicial Stamps.

357. The receipts from sales of judicial stamps remained practically at the same figure as in 1901-02, and maintained the increase of two lakhs over those of the year 1900-01.

Non-judicial Stamps.

358. The sale-proceeds of non-judicial stamps amounted to Rs. 12,42,778 as against Rs. 11,30,234 in 1901-02. The increase of Rs. 1,12,544 occurred under the head 'Impressed Stamps' (Rs. 93,857), 'Other Stamps' (Rs. 13,005) and 'Miscellaneous' (Rs. 5,682), and was due partly to the Delhi Darbár and partly to better understanding of the provisions of the Land Alienation Act.

Number of vendors.

359. The number of vendors has declined by 297, from 2,543 to 2,246. This can only be regarded as an improvement, as in many districts the number of vendors was far too great for the profits to attract respectable men.

Assessed Taxes.

Total assessments and collections.

360. The income tax assessments of the year 1902-03 were as follows :—

	Rs.
Salaries, &c., paid by Government	2,96,858
„ „ by Local authority	15,008
„ „ by Companies and private employers	51,728
Profits of Companies	44,122
Interest on securities	18,845
Other sources of income	11,16,869
TOTAL	14,53,430

Total collections are Rs. 14,53,430 as against Rs. 14,26,862 last year, while final demand shows Rs. 12,19,521 assessed on 45,265 assessees as against Rs. 12,16,155 assessed on 45,141 assessees last year; but the Delhi District shows an increase of nearly Rs. 10,000 in demand mainly due to improvement in trade (which, as stated in last year's report, had been suffering from depression), and to certain operations undertaken in connection with municipal taxation which brought to light several incomes liable to this tax. Ordinarily not more than one-third of the assessees should be expected to object. Important variations from this standard occur in Siálkot, Gujrát, Gujránwála and Ráwalpindi. The Commissioner of Ráwalpindi notes, as regards Gujrát, that assessees who had been paying at the same rate for years appealed simply as a matter of routine, and, as regards Ráwalpindi, that matters connected with income tax collection and assessment have for some time been in a very unsatisfactory condition in the district. In two of the four districts mentioned (namely in Siálkot and Ráwalpindi) the services of a special officer to revise assessments in the city and cantonments has been sanctioned, and this also should have an effect upon the number of objections, and it is probable that Act XI of 1903 will reduce the percentage of objections generally. Special assessments for the towns and cantonments of Amritsar, Batála, Ludhiána, Jullundur and Ferozepore have been sanctioned.

General Remarks.

361. The prevalence of plague and continuance of agricultural depression were again disturbing factors in the Income Tax administration, but there has been some improvement under the latter head, and, as regards plague, it is noticed in many places that people are now indifferent about it.

Forest Revenue.

[Forest revenue and expenditure have already been noticed in Chapter IV.]

Provincial Revenues.

Income and Expenditure.

362. The income and expenditure of the Provincial Service Account (see paragraph 312) for the past three years have been as follows :—

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1900-01	*Nil.*	1,97,52,035	2,05,78,447	− 8,26,411
1901-02	*Nil.*	2,22,50,328	2,07,53,978	+ 14,96,350
1902-03	14,96,350	2,21,11,132	2,14,28,393	+ 21,79,089

The figures for 1900-01 and 1901-02 are taken from the Accountant-General's Report on Punjab Balances and are subsequent to and more correct than the figures given in last year's Administration Report; similarly the figures for 1902-03 (which are the only ones available at present) are not final, but are liable to correction in next year's Administration Report. From the above it will be seen that the accounts of the first two years opened with no balance. The balance of Rs. 14,96,350 at the end of 1901-02 include a special grant of 4 lakhs made by the Government of India for outlay in 1902-03 on Educational and Medical buildings and a portion of the grant of Rs. 12,40,000 made in aid of Provincial Services at the beginning of the year. Similarly a sum of 10 lakhs is included in the closing balance of 1902-03 for expenditure on special works in the year 1903-04. The revenue classed as Provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial Rates, have been discussed above. Provincial Rates on land include the rate levied under the District Boards Act, 1883, which is noticed in the following section, and the Patwári Cess, the expenditure of which is shown under Land Revenue (Local). The greater portion of the expenditure, excluding irrigation expenditure, shown in the table in paragraph 314, is Provincial. The wholly Imperial heads of expenditure are Assignments, Political, Political Pensions, Ecclesiastical and Salt.

Provincial settlement.

363. The Provincial settlement which was entered into in March 1897 expired on 31st March 1902, but owing to the abnormal circumstances of recent years—famine, plague, separation of the frontier districts—and to the fact that the principles on which future settlements are to be based have only recently been formulated, it has been decided that the terms of the existing settlement shall continue till 31st March 1905.

Local Funds.

Finances.

364. The administrative work of District Boards has been reviewed in Chapter III. The finances of these Bodies are dealt with in the following paragraphs.

Audit.

365. The system of central audit introduced from April 1900 was found to be inadequate, and proposals for the substitution of a peripatetic audit on the lines of the system in force in the United Provinces of Agra and Oudh have recently been submitted to the Government of India.

Balances.

366. The aggregate balances rose from Rs. 8,23,000 on the 1st April 1902 to Rs. 9,80,000 on the 31st March 1903. Balances over Rs. 20,000, some of which were nominal, were at credit of the District Boards of Rohtak (Rs. 24,414), Karnál (Rs. 26,341), Delhi (Rs. 34,388), Ráwalpindi (Rs. 36,340), Gurgaon (Rs. 37,131), Gujránwála (Rs. 37,617), Amritsar (Rs. 37,948), Ludhiána (Rs. 46,051), Gurdáspur (Rs. 48,896), Kángra (Rs. 50,636), Gujrát (Rs. 53,778), Lahore (Rs. 55,643), Ferozepore (Rs. 1,23,542) and Jhang (Rs. 2,73,956). The District Funds of Ambala and Jhelum were overdrawn by Rs. 16,887 and Rs. 11,745 respectively. In the former case the overdraft was transferred to Provincial Revenues, it being due entirely to expenditure on plague, and in the latter case the deficit was adjusted by a Provincial contribution, subject to liability to adjustment when the Board's finances admit of it. The balances of the Hissar, Hoshiárpur, Jullundur and Siálkot District Funds fell below the prescribed minimum, owing in the case of Hissar and Siálkot to heavy suspensions and remissions of land revenue, and in the case of the other two funds to expenditure on plague.

Income and Expenditure.

367. Eliminating Debt head transactions, the income and expenditure of the year amounted to Rs. 29,82,000 and Rs. 28,29,000 as against Rs. 31,85,000 and Rs. 29,81,000 (excluding such plague charges as were transferred to Provincial) in the previous year. The decrease in the receipts occurred mainly under the heads "Provincial Rates" (Rs. 2,50,000) and "Irrigation—Minor Works" (Rs. 30,000), and was in the former case due to heavy remissions and in the latter to scanty rainfall. The decrease was partly counterbalanced by increases of Rs. 15,000, Rs. 14,000, Rs. 22,000 and Rs. 28,000 under

the heads "Medical," "Scientific and other Minor Departments," "Civil Works" and "Contributions" respectively. The expenditure was less by Rs. 61,000 under the head "Medical" owing to less outlay on plague and by Rs. 1,97,000 under the head "Contributions," which is accounted for by the fact (1) that the 20 per cent. contribution payable to Provincial Revenues in respect of the portion of the Local Rate assigned to District Funds was smaller in consequence of the remissions above mentioned, (2) that the Hissar District Board was not able to meet its liabilities under this head owing to famine in earlier years having crippled its funds, and (3) that the Provincial contribution of Rs. 55,000 towards Primary School buildings was paid by reduction of the contributions payable by District Boards. This decrease in expenditure was partially neutralized by the increases under the heads "Education" (Rs. 25,000), "Irrigation—Minor Works" (Rs. 15,000) and "Civil Works" (Rs. 70,000). The principal variations under specific heads are more fully explained in the following paragraphs.

Provincial Rates.

368. The collections in 1902-03 decreased by Rs. 2,50,000 as compared with the previous year, but the figures of that year were above the average, as the excellent harvests enabled the outstandings of previous years to be recovered along with the year's demands. The Jhang District Board again maintained its record for the largest revenue under this head, realizing Rs. 2,00,000 against Rs. 1,68,000 in the preceding year. This is due to the steady expansion of cultivation in the Chenab Canal Colony, and the consequent increase of land revenue and cesses levied on it.

Education.

369. The income exceeded that of the previous year by Rs. 8,600, the increase appearing chiefly under the heads "Fees in Middle Schools" (Rs. 3,000), "Contributions" (Rs. 4,500) and "Miscellaneous" (Rs. 1,000). Some of the schools which had to be closed in 1901-02 on account of plague were re-opened in 1902-03 and the school fees recovered themselves as in Siálkot. The opening of new schools in some districts also added to the fee income. On the other hand, plague necessitated the closure of schools in the year under review in Ambala, Hoshiárpur, Ludhiána and Gurdáspur, and the income in these districts naturally decreased. About 91 per cent. of the total receipts in 1901-02 and 88 per cent. in 1902-03 were derived from fees levied in the Middle and Primary Schools, which covered 15 and 16 per cent. of the total expenditure on Education in the two years. The total outlay on Education was Rs. 6,59,000, or Rs. 25,000 more than in the previous year. Of this increase, Rs. 6,000 were devoted to the Middle Schools, Rs. 12,000 to the Primary Schools, Rs. 2,000 to the Zamíndári Schools, and Rs. 2,000 to Scholarships. The Middle, Primary and Zamíndári Schools absorbed 22, 48 and 4 per cent. of the outlay. Nearly 18 per cent. of the total expenditure was met from the receipts recorded under the head "Education" and 82 per cent. from the District Fund income from other sources. The net total expenditure on Education, after deducting the receipts on the same account, absorbed 30 per cent. of the Local Rate collections and 23·47 per cent. of the total income (less Debt head receipts and Contributions) as compared with 25 per cent., the minimum that may be prescribed by Government. Grants aggregating Rs. 55,000 were placed by Government at the disposal of District Boards for Primary School buildings.

Medical.

370. The receipts recorded under this head show an increase of Rs. 14,600. Of this Rs. 6,000 are found in "Contributions" and represent additional grants from Municipal Funds in aid of Vaccination Establishments and "Hospitals and Dispensaries." The increase of about Rs. 12,000 in "Other Receipts" was almost entirely due to the sale of old materials formerly purchased in connection with plague. The total receipts equalled 10 per cent. of the total expenditure on Medical Relief. Excluding plague charges, the outlay on Medical Relief was Rs. 3,53,000 against Rs. 3,41,000 in the previous year. Of these totals Hospitals and Dispensaries absorbed Rs. 2,70,000 and Rs. 2,63,000, Vaccination Rs. 59,000 and Rs. 56,000, and Sanitation Rs. 5,000 and Rs. 4,000, payment to Medical Schools Rs. 2,000 in each year, and Leper Asylums Rs. 15,000 and Rs. 16,000. The appointment of a Military

Assistant Surgeon at Pálampur, of a Lady Doctor at Hoshiárpur and the establishment of new dispensaries at Manimájra in Ambala and at Sarái Amánat Khán in Amritsar account for a part of the increase under "Hospitals and Dispensaries." The net expenditure was equal to about 14 per cent. of the Local Rate and 10 per cent. of the total District Fund income (excluding Debt head transactions and Contributions).

Plague charges.

371. The plague charges amounted to Rs. 92,000 only against Rs. 1,65,000 in the previous year, and the decrease was due in part to the paucity of funds owing to the demands in previous years on the accrued balances. The districts chiefly affected by the scourge were Ambala, Hoshiárpur, Jullundur, Ludhiána, Ferozepore, Lahore, Gurdáspur, Siálkot, Gujránwála, Gujrát and Shahpur. The expenditure on plague in Ambala was heavy, causing an overdrawal of Rs. 16,887 on the 31st March 1903.

Scientific and other Minor Departments.

372. The income was better by Rs. 14,000 than in the preceding year. Increases occurred under the heads "Botanical and other Public Gardens" (Rs. 7,000), "Horse Fairs" (Rs. 3,000), "Cattle Fairs" (Rs. 3,000) and "Miscellaneous" (Rs. 1,300). Under the first head Rs. 2,000 were contributed from Provincial Revenues to enable the Lahore District Board to carry out the work of renovation in the gardens attached to the tomb of the Emperor Jahángír at Shahdara. Under "Horse Fairs" the principal increase occurred in the Ráwalpindi District and is accounted for by the fact that a part of the income pertaining to the year 1901-02 was realized in 1902-03 and also by the attendance at the horse fair in the latter year being better. The receipts under the head "Cattle Fairs" show abnormal variations. There was a drop of Rs. 7,000 in Hissar, as the Hissar and Sirsa Spring Fairs were abandoned owing to plague. The Rohtak District Board realized Rs. 13,400 more as three cattle fairs were held in 1902-03 as compared with one held in 1901-02. The Gurgaon and Gujránwála Boards lost Rs. 1,500 and Rs. 1,300, respectively, owing to the closure of the Rewári and Eminabad Fairs on account of plague. The expenditure aggregated Rs. 1,29,000 against Rs. 1,36,000 in the previous year. The Veterinary charges fell from Rs. 25,000 to Rs. 11,000 in consequence of the provincialization of the Subordinate Veterinary Establishment, the District Board's share of the cost being adjusted through the head "Contributions." The Bull and Stallion charges show a decrease of Rs. 7,000 attributed generally to the smaller number of bulls and stallions purchased during the year. On the other hand, Rs. 6,800 was expended in excess on Horse Fairs, Rs. 1,600 on Cattle Fairs, and Rs. 6,000 on Public Gardens. Higher expenditure under Public Gardens was incurred mainly in Delhi, where nearly Rs. 1,000 were spent in planting gardens at the tombs of Safdar Jang and Humáyún, and in Lahore where Rs. 2,000 was mostly expended on certain improvements in the Shahdara Gardens.

Irrigation Minor Works.

373. There was a falling-off of Rs. 30,000 in the income as compared with that of the previous year, the districts affected being Gurgaon (Rs. 5,000), Karnál (Rs. 3,000), Ferozepore (Rs. 12,000), and Montgomery (Rs. 13,000). The decrease is generally due to short supplies of water in the bunds and local canals consequent on the scanty rainfall. With reference to the Montgomery local canals the Commissioner remarks that "it is most desirable that the canals should be taken over by Government; the District Board cannot bear excessive variations such as this." The proposed transfer to the Irrigation Department has since been sanctioned with effect from the 1st of October 1903 on the condition that all charges from the 1st April 1903 are borne by that Department. The charges aggregated Rs. 42,000 against Rs. 27,000 in the preceding year. Rs. 14,000 of the increase occur in the accounts of the Karnál District Board, being due to expenditure on the widening of the Sarsuti Canal.

Civil Works.

374. The increase in the income from Rs. 3,14,000 to Rs. 3,36,000 occurred under the heads "Sale of buildings" (Rs. 4,000) and "Sale proceeds of trees, grass, &c." (Rs. 17,000). The expenditure on Arboriculture amounted to Rs. 90,000 as against Rs. 1,11,000 realized on the same account under the head "Scientific and other Minor Departments," which gives a return of 123 per cent. The total outlay on Civil Works was Rs. 8,00,000 as against Rs. 7,30,000 in the previous year, and was spread over the heads "Public

Works, including the cost of the Engineering Establishments" (Rs. 6,73,000) and "Miscellaneous" (Rs. 1,27,000).

Contributions.

375. The contributions from Local to Provincial show a falling-off of Rs. 1,97,000, as compared with the previous year, due to the causes adverted to under "*Income and Expenditure.*" The total amount of contributions which were payable by all the District Boards aggregated Rs. 2,68,800 on the 31st March 1903 against Rs. 3,09,770 on 31st March 1902.

General Remarks.

376. Several causes contributed towards the finances of District Boards being adversely affected during the year. Under the special orders of the Government of India, land revenue amounting to 39 lakhs of rupees previously under suspension in districts affected by famine was remitted, and this entailed the remission of the local rate assessable thereon. Heavy suspensions of land revenue were also necessary in certain districts, notably Hissar and Rohtak, and the District Boards concerned suffered proportionately. Taking the Province as a whole, the income from local rate was only 69 per cent. of the District Boards' income as compared with 73 per cent. in the previous year. The outbreak of plague also adversely affected District Funds partly through receipts being diminished owing to the abandonment of horse fairs, the closure of schools and other similar causes, and partly through the increased expenditure necessitated in combating the disease, with the result that ordinary works and establishments suffered severely. Plague expenditure has now (though this is subsequent to the year under report) been divided into (*a*) Provincial and (*b*) Local, separate estimates being prepared under each head. Provincial plague expenditure will be met from Provincial Funds, and, in the case of Local, it has been decided that District Boards will in future be allowed to make provision in their budgets for reasonable expenditure under the heads of Medical, Educational, Public Works, Establishments, &c., and it will then be determined whether each District Board can bear the whole of its estimated local plague expenditure or only a part of it. The amount, if any, by which such charges exceed the part of them which the District Board can bear will be borne by Government. In consideration of this concession and in order to secure proper checks upon such expenditure, all local plague expenditure will be disbursed and audited in the same way as if it were Provincial. The amount to be borne by District Boards will be subject to readjustment, if necessary, after the close of the year, upon a review of the accounts as finally made up.

Municipal Funds.

Audit.

377. The system of central audit introduced from April 1900 was found to be inadequate, and proposals for the substitution of a peripatetic audit on the lines of the system in force in the United Provinces of Agra and Oudh have recently been submitted to the Government of India.

Balances.

378. The balances of the several Municipalities and Notified Areas at the beginning of the year 1902-03 aggregated Rs. 16,12,000, *viz.*, Rs. 14,29,000 in cash and Rs. 1,83,000 in investments; at the end of the year they aggregated Rs. 17,98,000, *viz.*, Rs. 14,83,000 and Rs. 3,15,000, showing an increase of Rs. 54,000 and Rs. 1,32,000 respectively. The increase in cash balance calls for no comment, and that in invested balance is on account of fresh investments amounting to Rs. 1,77,000 counterbalanced by sale of securities of the value of Rs. 45,000 by the Municipal Committees of Hissar (Rs. 10,000) and Simla (Rs. 35,000). The balances of some of the Municipalities fell below the minimum prescribed by Government, but none of the Municipalities and Notified Areas overdrew its balance during the year. On the other hand, there are some Municipalities whose balances are largely in excess of the prescribed minimum and of outstanding liabilities. It is satisfactory to note that there were no embezzlements of Municipal Funds during the year.

Loans.

379. The balance of loans to Municipalities outstanding on the 31st March 1903 is more than the previous year by Rs. 4,36,000. This represents the difference between loans aggregating Rs. 6,13,000 taken up during the year

by the Municipal Committees of Delhi (Rs. 10,000), Ambala (Rs. 33,000), Simla (Rs. 54,000), Lahore (Rs. 3,00,000) and Amritsar (Rs. 2,16,000) for water, drainage and other works in progress in those Municipalities and a total of Rs. 1,77,000 repaid by Delhi (Rs. 25,000), Ambala (Rs. 1,000), Simla (Rs. 74,000), Hoshiárpur (Rs. 1,000), Ludhiána (Rs. 3,000), Lahore (Rs. 55,000), Dalhousie (Rs. 2,000), Murree (Rs. 2,000) and Dera Gházi Khan (Rs. 14,000) in respect of loans taken up in previous years.

Revenue and Expenditure.

380. The total income and expenditure of the Muncipalities and Notified Areas exclusive of *Debt Head Transactions* amounted to Rs. 49,39,000 and Rs. 51,92,000 against Rs. 47,65,000 and Rs. 44,98,000 respectively in the preceding year. The causes of variations under the main heads are alluded to in the following paragraphs.

Realizations under Special Acts.

381. The total realizations amounted to Rs. 49,000 against Rs. 35,000 in the previous year. The major portion of the receipts were collected under the provisions of the Cattle Trespass Act and the Hackney Carriages Act. The increased income was chiefly contributed by the Delhi Municipality owing to the large number of licenses for carriages during the Coronation Darbár and also to an enhanced license fee having been fixed during that period.

Revenue derived from Municipal property and powers apart from taxation.

382. The total income under this head amounted to Rs. 9,25,000 against Rs. 6,57,000, showing an increase of Rs. 2,68,000. The increased income was derived mainly from the *Sale proceeds of land and produce of land* (Rs. 2,36,000), by larger sales of properties in the towns of Delhi, Amritsar, Sángla, Lyallpur, Jalálpur, Lahore and Kálabágh. The sale to the East Indian Railway Company in Delhi Municipality of one property alone called "More Sarái" realized Rs. 1,65,000. The remaining increase occurred under "Rents of lands and houses, &c." (Rs. 21,000), "Conservancy Receipts" (Rs. 12,000), "Fees and revenue from markets and slaughter-houses" (Rs. 11,000), "Receipts from educational institutions" (Rs. 2,000); while under "Medical Receipts" there was a decrease of Rs. 14,000, due mainly to the fall of Rs. 13,000 in the income of the Ripon Hospital, Simla, on account of the opening of the "Walker Hospital" and the transfer to that institution of the European paying-patients. The income from other sources, *viz.*, *Other Fees*, *Fines under Municipal and other Acts* and *Interest on investments*, &c., amounted to Rs. 41,000, which about equals the realizations in the preceding year. Miscellaneous receipts amounted to Rs. 3,94,000 against Rs. 3,38,000 in the previous year. The recoveries on account of services rendered to private individuals do not much vary from those in the preceding year. The income from *nazúl* properties rose from Rs. 47,000 to Rs. 73,000 during the year under report on account of new leases during the Coronation Darbár at Delhi and increased rents realized on that occasion. The income (subscription and other receipts) of the Leper Asylum at Tarn Táran amounted to Rs. 6,500 against Rs. 7,800 in the preceding year, the decrease being due to a reduction in the number of inmates. From *Sales of water* the receipts were Rs. 15,000 better than those of the previous year, and were derived chiefly in Delhi (Rs. 10,000) due again to the Coronation Darbár. The income from Cattle, Horse and other fairs showed an improvement of Rs. 6,000, which represents the net income of the Thánesar Sun Eclipse Fair.

Expenditure.

383. The total expenditure incurred from Municipal Funds during the year under review amounted to Rs 51,92,000 against Rs. 44,98,000 in 1901-02, which was devoted to the several major heads of service in the proportion noted in the margin.

General Administration ...	13·3
Public Safety ...	13·8
Public Health and Convenience ...	52·7
Public Instruction ...	11·5
Contributions ...	2·4
Miscellaneous ...	6·3

General Administration and Collection.

384. The expenditure under this head amounted to Rs. 6,93,000 against Rs. 7,35,000 in the previous year. It includes the cost of collecting and refunds of taxes.

Public Safety.

385. There was an increase of Rs. 58,000 in the expenditure on this account as compared with the preceding year, the outlay on (1) *Fire Establishment*, (2) *Lighting*, and (3) *Police*, respectively, being s. 5,000, Rs. 21,000 and Rs. 32,000 higher, chiefly due (1) to the purchase of appliances for the Fire Brigade in Simla and of a fire engine in Batála, (2) to the increase of kerosine oil lamps during the Coronation Darbár and the installation of electric lighting in Delhi, and (3) to the construction of a house for the City Superintendent of Police, Delhi, and of new Police Stations in Lahore, Mooltan and Jalálpur, and to an increase in the strength of the Police establishment in Lahore.

Public Health and Convenience.

386. The expenditure charged to this head amounted to Rs. 27,36,000 against Rs. 21,05,000 in the preceding year. The increase of Rs. 6,31,000 falls chiefly under (1) Water-supply (Rs. 3,29,000), (2) Drainage (Rs. 1,19,000), (3) Hospitals and Dispensaries (Rs. 1,10,000), (4) Public Works (Rs. 91,000), (5) Markets and Slaughter-houses (Rs. 16,000), and (6) Arboriculture (Rs. 10,000), partly counterbalanced by a decrease of Rs. 46,000 under the sub-head "Conservancy." The excess under Water-supply is due to the construction of water-works at Amritsar and Lyallpur and to the improvements of water-supply in Lahore, and that under Drainage is on account of large outlay on drains in Lyallpur, Delhi, Ambala and Chunián. The increased expenditure under Hospitals, &c., is mainly due to heavy plague charges incurred in plague-infected towns to the construction of the new Victoria Jubilee Hospital at Amritsar, and to improvements to certain Dispensary buildings. The main portion of the increased expenditure on Public Works was incurred by the Delhi Municipality on account of the appointment of a Municipal Engineer, repairs to the Town Hall and reflooring it with marble, repairs to the Municipal Workshop, the building of new godowns, and also to extensive repairs to roads consequent on the Coronation Darbár. In the cases of "Markets and Slaughter-houses" and "Gardens" Delhi also took the lead, having spent a large amount on roofing part of the slaughter-house and on improvements to the fountains in the Queen's Gardens and to repairs to the pavilion in the Roshanára Garden.

Public Instruction.

387. The total expenditure on this account from Municipal Funds during the year 1902-03 was Rs. 5,95,000 against Rs. 5,80,000, or Rs. 15,000 more than in the previous year. The increase is due partly to the construction of boarding-houses at Rewári and partly to petty repairs to, and the purchase of furniture for, certain school buildings, as also to increases in the school establishments.

Contributions.

388. The expenditure amounted to Rs. 1,27,000 against Rs. 1,36,000 in the year 1901-02. The decrease is mainly due to the postponement of the payment by certain Municipal Com mittees of the contribution in respect of certain localized provincial properties, as the proposals for the revision of contributions payable for the quinquennial period commencing with 1902-03 were then under consideration.

Miscellaneous.

389. The expenditure charged under this head amounted to Rs. 3,25,000 against Rs. 2,84,000 in the previous year. The difference is chiefly due to the payment of more interest consequent on an increase in the loans raised, and to certain special expenditure incurred in connection with the Coronation celebrations.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information and statistics will be found in the following reports and publications :—

Census.—Report on the Census of the Punjab and North-West Frontier, 1903, by H. A. Rose, I. C. S.

Births and Deaths.—Sanitation.
- Report on the Sanitary Administration of the Punjab for the year 1902.
- Judicial and Administrative statistics of British India, seventh issue, 1903 Tables XIII.

Emigration.—
- Census Report, *as above.*
- Financial and Commercial Statistics of British India, tenth issue, 1903 Table XXXV—4.

Medical Relief.—
- Report of the Dispensaries and Charitable Institutions of the Punjab for the year ending 31st December 1902.
- Statistics of the Punjab Lunatic Asylum for the year 1902.
- Judicial, &c., Statistics, *as above.* Tables XIV and XV.

Vaccination.—
- Report on Vaccination in the Punjab for the year 1902-03.
- Judicial, &c., Statistics, *as above,* Tables XVI.]

Births and Deaths.

Births.

390. There were 880,477 births registered in the Punjab in 1902, equal to a rate of 43·8 per 1,000 of the population. This rate was 8·4 per 1,000 higher than in 1901 and 3·8 in excess of the mean ratio for the previous five years. The highest birth-rates, varying between 54 and 45 per 1,000, were recorded in the districts of Siálkot, Gujrát, Gurdáspur, Mooltan, Lahore, Gurgaon, Ferozepore, Amritsar, Jhang and Shahpur. In 12 other districts the birth-rate was between 44 and 40 per 1,000. There were only five districts in which the birth-rate was under 40 per *mille, viz.*, Dera Gházi Khan, Kángra, Ludhiána, Ambala and Simla. The Provincial birth-rate in 1902 was 0·3 per 1,000 less than the death-rate. The excess of deaths over births was very considerable in the worst plague-infected districts. In Ludhiána it was as high as 67·2 per *mille*, in Ambala 29·2, in Jullundur 14·7 and in Siálkot 12·3. There was a very substantial increase of births over deaths in the Ráwalpindi and Mooltan Divisions which were practically free from plague during the year.

Deaths.

391. The number of deaths registered in the Province during the year amounted to 886,973, yielding a rate of 44·1 per *mille.* Of the total death-rate, 0·02 was due to cholera, 0·6 to small-pox, 8·5 to plague, 23·5 to fevers, 0·7 to dysentery and diarrhœa, 2·8 to respiratory diseases, 0·3 to injuries and 7·6 to all other causes. The Provincial death-rate was 8 per 1,000 higher than in the previous year. This increase was due entirely to plague. An excessive death-rate of 103·9 per *mille* was recorded in the district of Ludhiána. The next highest rates, 66·7 and 66·6, were registered in the districts of Siálkot and Ambala. The death-rate was also very high in Jullundur, Gurdáspur, Lahore and Hoshiárpur, ranging from 42 to 55. The excessive mortality in all these districts was due to plague. In some of the minor towns also there was a great

increase in the mortality on account of the prevalence of plague. A high death-rate of 177 per 1,000 was recorded in Khanna, 153 in Jagraon, 137 in Ráekot and 133 in Máchiwára in the Ludhiána District, 143 in Jámke in the Siálkot District and 112 in Rúpar in the Ambala District. Of the total Provincial death-rate of 44·1 per *mille* 41·1 was recorded among males and 47·6 among females, as against the average rates of 32·2 and 35·4 during the previous quinquennial period. The abnormal excess in the female over male deaths during the year is attributed to plague. It was most marked at the age-period 10—15, in which it amounted to 54 per cent. The mortality was, as usual, very high among infants under one year of age. It was at the rate of 316·44 among males and 320·76 among females per 1,000 living of each sex according to the Census of 1901, and 233·43 and 241·84 calculated on the number of births recorded in the Province during the year. The next highest rates were 966·6 among males and 112·41 among females of the age of 60 years and upwards, and 62·16 and 65·93 among children between 1 and under 5 years. The death-rate among Hindús is usually higher than among Muhammadans in the Province as a whole. In 1902, the Hindu death-rate was 46·75 and the Muhammadan 41·88 per 1,000. The rates, however, vary considerably in different districts. In the Hissar District, for instance, the Hindu death-rate was higher than the Muhammadan rate, while in the districts of Montgomery, Lahore and Gujránwála the reverse was the case. A convincing explanation of this has not yet been found. The death-rate among Native Christians was 23·74 per 1,000 during the year.

Influence of prices on births and deaths.

392. The rise in the birth-rate noticed, to a greater or less extent, in every district of the Punjab in 1902, may be the result, among various other causes, of an increase in the number of marriages in consequence of the previous year being one of abundance as regards prices of food-grains throughout the Province. In western countries where marriages are registered, an increased marriage rate is observed in a year of prosperity following a period of scarcity. With regard to the effect of the prices of food on the death-rate of the Province, the year 1902, except for the prevalence of plague, was a fairly healthy one, and this may be due, to a certain extent, to the normal rates, with which the previous year closed, having been maintained in 1902, with little variations, in the Province generally.

Cholera.

393. The Province was practically free from cholera during the year. There were only 371 deaths registered from the disease. Of this number 162 occurred in the district of Ambala, 126 in Gurgaon, and 38 in Kángra.

Small-pox.

394. The deaths registered under the head of small-pox numbered 11,629 against 6,154 in the previous year. The rate of mortality was very high in the districts of Shahpur, Muzaffargarh, Montgomery, Simla, Dera Gházi Khan, Jullundur and Jhelum. Of the 140 Municipal towns, the following had the highest death-rates:—Pindigheb in the Ráwalpindi District 11·83 per 1,000; Srígovindpur, Dínanagar and Gurdáspur, all in the Gurdáspur District, 10·05, 8·67 and 5·3; Patti in Lahore 6·84; Kila Dídár Singh in Gujránwála 6·65; Kartárpur in Jullundur 5·63; Khusháb in Shahpur 5·52; Kunjáh in Gujrát 5·29; and Dunyápur in the Mooltan District 5·12. In none of these towns is vaccination compulsory. In the 22 towns in which the Vaccination Act is in force the death-rate from small-pox was comparatively low; the highest rate recorded was in Pind Dádan Khan, and that did not exceed 1·6 per *mille*.

Plague.

395. There was a great increase in the mortality from plague during the year; the number of deaths recorded during the year amounted to 171,302, yielding a rate of 8·52 per *mille* against 0·74 in 1901. The disease was confined mostly to the central and thickly inhabited parts of the Province. The district of Ludhiána was the greatest sufferer. There were no fewer than 47,671 deaths registered in it, or at the rate of 71 per 1,000. In the district of Ambala the death-rate from plague was 30, in Siálkot 26, in Jullundur 19, in Gurdáspur 16, in Hoshiárpur 13 and in Lahore 10 per 1,000. In these seven districts 90 per cent. of the Provincial mortality from plague was recorded. The disease

increased rapidly in the winter months, reached its climax in spring, declined suddenly with the commencement of the hot weather and disappeared almost entirely in July, August and September. It is gratifying to notice that the larger towns have hitherto escaped severe outbreaks.

Fevers.

396. With regard to the prevalence of fevers the year was a fairly normal one. The monsoon rainfall was below the average. The total deaths recorded under the head of fevers were 473,352, corresponding to a rate of 23·34 per 1,000, or 1·72 less than the rate for 1901 and only 0·97 above the mean ratio for the previous five years. There was an unusual increase in the mortality from fevers in the district of Hissar during the first quarter of the year, which is ascribed to cerebro-spinal fever of a very severe and fatal type. There was a great increase in the fever death-rate in the city of Delhi during the first half of the year which is attributed to the same cause.

Dysentery and Diarrhœa.

397. The deaths recorded under this head numbered 14,124, equal to a rate of 0·7 per 1,000, which is 0·13 lower than the mean ratio for the previous five years. The town death-rate was four times as high as in the rural circles, being 2·16 per 1,000 against 0·54 per *mille*. It was excessive in the following towns:— Kálabágh in the Miánwáli District 9·96 per 1,000; Pind Dádan Khan 9·22; Khánpur (Notified Area), a suburb of Hoshiárpur, 6·28; Búriya in the Ambala District 5·63; Fírozpur and Sohna in the Gurgaon District 5·22 and 5·15; and Ballabgarh in the Delhi District 5·1. Dysentery and diarrhœa and fever rates rise concurrently and it is worthy of note that in all the towns named above, with one exception, the mortality from fevers was also very high.

Respiratory Diseases.

398. The deaths from respiratory diseases are shown separately for the first time in the returns. The total deaths registered under this head were 57,015, equal to a rate of 2·84 per *mille*. The district rate varied from 9·1 per 1,000, in Gurdáspur to a figure as low as 0·3 in Rohtak, and this is due to misclassification.

Injuries.

399. The deaths recorded under this head amounted to 6,392. This number included 315 from suicide, 451 from wounding, 4,437 from accidents and 160 of persons killed by wild beasts. The mortality caused by snake-bite was 1,029, and from hydrophobia 98. There were 543 patients (215 European and 328 Native) treated during the year ending 8th August 1902 at the Pasteur Institute at Kasauli, or 222 more than in the previous year. There was no failure among the European patients; among the native patients five failures were reported.

All other causes.

400. The deaths grouped under this head numbered 152,783, yielding a rate of 7·6 per 1,000 as against 6·8 in the preceding year.

Emigration and Immigration.

Inland emigration.

401. The Inland Emigration Act of 1882 is not in force in this Province.

Emigration to East Africa.

402. The Emigration statistics published by the Government of India show that there was practically no emigration to East Africa from the Punjab during the year. This is doubtless due to the fact that the Uganda Railway is now completed.

Emigration to other countries.

403. Some recruiting takes place under Act XXI of 1883 in Delhi and the surrounding districts, and it is believed that the emigrants go chiefly to Fiji, Borneo, Sumatra and Mauritius, but the number of emigrants is not large. The effect of the Immigration Restriction Act, 1901, passed by the Commonwealth of Australia and by the Cape Colony Immigration Act, 1902, has the effect of practically excluding from those two colonies Indians of the labouring and petty trading classes.

Medical Relief.

Dispensaries opened and closed.

404. Eight new dispensaries were opened during the year, and only 3 closed. Those newly established were in the Jhang, Hissar, Simla, Gurdáspur, Amritsar and Dera Gházi Khan Districts. At the close of December 1901 there were 245 dispensaries, and on the 31st of December 1902 there were 249.

In-door patients.

405. There were 50,138 in-patients treated during the year. This is 1,427 less than the number who obtained in-door treatment in the preceding year. Of the total number of in-door patients, 36,343 were men, 10,393 women and 3,402 children. Those returned as cured numbered 34,061, relieved 8,597, discharged otherwise 4,350, and died 2,385. The death-rate was 4·75 compared with 4·54 in 1901. The number of beds available was 2,939, of which 2,038 were for men and 901 for women. The number of beds in 1901 was 2,830. That there is no lack of in-door accommodation is clear from the fact that the daily average number of in-patients was only 1,684·77.

Out-door patients.

406. Those who sought out-door medical relief in 1902 numbered 2,968,988, compared with 2,973,446, a decrease of only 4,458, and this in a comparatively healthy year. The daily average attendance at dispensaries was 19,736·04, compared with 19,897·67 in 1901. Although there has been a decrease in the total number of patients compared with last year, the proportion of patients to the total population of the Province remains the same, *viz.*, 14·8 per cent.

Diseases treated.

407. Cases of malarial fever were 475,985, and compared with 1901 were fewer by 74,734. Lung diseases increased, while other diseases of the respiratory system fell off by 11,361. There was a large increase of eye-case by over 60,000. 103 cases of natural labour were treated at dispensaries. Except at the Lady Aitchison Hospital, Lahore, Mayo Hospital, Lahore, and the Female Hospital, Amritsar (a strictly purdah institution), such cases are, as might be expected, infrequent. At the three institutions named there were 46, 12 and 9 confinements respectively. There were 153,408 surgical operations performed in dispensaries. The number is an improvement on the record for 1901, and this is all the more satisfactory, seeing that there was, as already noted, a falling-off of the in-door and out-door patients. The death-rate from all operations was ·16 in 1902, compared with ·17 in 1901. At the head-quarters of districts there exist, in almost all cases, all the conveniences and appliances for surgical work. Among the more important operations may be mentioned 2,031 for stone in the bladder, with 63 deaths; 5,700 for extraction of lens (cataract), with 92·33 percentage of cures; 281 amputations for injury or disease, with 19 deaths; and 11 for ovariotomy, with 3 deaths.

Finance.

408. The income of hospitals and dispensaries in 1902 was Rs. 5,47,120. There was a cash balance of Rs. 14,125, bringing up the total to Rs. 5,61,245. The expenditure was Rs. 5,43,907, leaving a credit balance of Rs. 17,467. The sum of Rs. 3,000 was invested. The Provincial contribution towards medical relief is about 3 per cent. of the whole income. Local Funds contributed Rs. 2,27,778 and Municipal Funds Rs. 2,74,860. Subscriptions amounted to Rs. 10,855, that is, Rs. 2,562 from Europeans and Rs. 8,293 from natives, showing a heavy falling-off of over Rs. 11,000. The items of expenditure call for little notice. Diet charges, Rs. 22,749, show a decrease, Rs. 4,583, and the smaller expenditure on buildings, Rs. 20,837, is a good deal due to the unusually high figure of 1901 on this account. The superior medical staff—Assistant Surgeons and Hospital Assistants—cost Rs. 190,465, and the inferior establishment Rs. 94,386.

General.

409. Improvements have been made to the Lahore Medical College; an ophthalmic ward has been added to the Mayo Hospital; land has been taken up for a Students' Boarding House and separate rooms will be built for the teaching of chemistry.

PUNJAB LUNATIC ASYLUM.

Statistics of the year.

410. The total population under treatment in 1902 was 627; in the year preceding it was 610; and in 1900 it was 608. These figures represent a steady increase. One year earlier was the last before the amalgamation of the two asylums; the total population was then 607. Going back ten years from that under review it is noted that the population was 463 in 1893. It is somewhat difficult to say whether a new and more attractive asylum has had anything to do with the increase of population. Perhaps it has, and with the extension of the institution, in progress, it may be expected that demands for admission will increase. The number remaining under treatment on 31st December 1902 was 503, and the daily average strength was 491·02, consisting of 390·39 men and 100·63 women. The daily average number of criminal lunatics in confinement was 104·22 in 1902, compared with 108·99 in 1901. 44 lunatics were discharged cured and 28 were made over to friends, 2 of whom had not improved. The daily average number of sick was 44·76 (35·89 of men and 8·87 of women). This compares favourably with the preceding year, when the daily average was 53·59, but it is somewhat higher than the average of 1900, when it was 41·93. The number of deaths in 1902 was 39, including 9 women; in 1901 it was 56; and in 1900, 50. It is worthy of note that as many as 23 of the deaths occurred among patients the cause of whose insanity was unknown. Excluding building charges, the expenditure was Rs. 63,501, and the profits from manufactures amounted to Rs. 4,550 compared with Rs. 4,176 last year. The receipts from paying patients have risen from Rs. 1,879 to Rs 2,034. The average number of lunatics employed on manufactures was 147·91, that is, 131·04 males and 16·87 females. Not only does the work done by the inmates pay financially but steady labour improves their character and health.

LEPER ASYLUMS.

Statistics of the year.

411. The total number of lepers treated in the six Asylums at Ambala, Dakhni Serái (Jullundur), Dharmsála, Tárn Táran (Amritsar), Bába Lakhan (Siálkot) and Ráwalpindi was 542, including 390 remaining from the previous year and 152 admissions. Of the total 56 died and 79 left of their own accord, leaving at the close of the year 407 lepers in residence. The expenditure on the asylums was Rs. 22,763 compared with Rs. 24,034 in 1901.

Sanitation.

Sanitary works.

412. The Sanitary Board met seven times during the year. The proceedings of the Board and the report of the Sanitary Engineer show that considerable improvements are being effected in the water-supply and sanitation of several large towns of the Province. The Municipal Committee of Lahore were occupied with the following works:—

(1) Extension of the pipe distribution system over the whole of the city and civil station.

(2) The erection of a second new pumping engine.

(3) The sinking of new trench wells to permit of a larger supply being pumped.

(4) A steam tramway to remove refuse from the city.

(5) Improvement of the main extra-mural intercepting drain round the city.

The survey portion of the Hánsi Drainage Scheme has been completed, and the matter is now pending with the Sanitary Engineer, Punjab. The extra-mural portion of the Ambala City Drainage Scheme has also been completed. Estimates for the intra-mural portion of the scheme prepared by the Sanitary Engineer and amounting to Rs. 58,000 odd have been received, and the Municipal Committee is endeavouring to finance a portion of the cost, leaving the remainder to be met out of current expenditure or as funds may become available A proposal for starting a sewage farm owned and managed by the Municipal Committee in order to utilize the sullage water to the best advantage, which was under the consideration of the Committee on the recommendation of the Sanitary Board, Punjab, has been dropped for the present for want of funds. The question of the Delhi Municipality raising a loan of Rs. 5,46,000 in the local market for the completion of the Delhi Intra-mural Drainage is still under the consideration of the Committee. In the meantime steady progress is being made in the execution of the project, the cost being met out of current revenue. The schemes for the drainage of Gujrát and Ráwalpindi Towns are still under consideration. A scheme for the drainage of Hazro Town is also said to be under preparation. The Delhi Water-Works are now completed, and the city is adequately supplied with pure water, but when the extensions of mains are made to the suburbs it will probably be necessary to increase the pumping plant at the head-works. The matter of water-supply in Simla is at present engaging the attention of the Local Government. In Ambala the water-supply was very much diminished owing to the low yield of water at the head-works, so much so that the supply to the North-Western Railway had to be cut off, the Railway bringing their supply of water daily in tank trucks from Rájpura. It is proposed to increase the supply by the construction of four additional wells. The necessity of the work is due principally to demands other than those of the town. The water-supply at Kálka entirely failed last year, and improvements are being carried out by the Kálka-Simla Railway Company. It is expected that the new project will be in working order in October next. The construction of the Amritsar Water-Works has made considerable progress during the year, and a new hospital is also in course of erection. At Lyallpur the drainage works were put in hand and good progress was made with them. In Ferozepore a project has been taken in hand for a sewerage system which will deal with sewage only and exclude storm water.

Sale of manure.

413. During the year the sale of manure in the Municipal towns fetched Rs. 1,55,674 as against Rs. 1,50,471 last year.

Sewage irrigation.

414. The following Municipalities dispose of sewage to cultivators, *viz.*, Delhi, Ludhiána, Lahore, Amritsar and Gujránwála, and the prices charged vary. In Amritsar the area under sewage cultivation during the year was 383 acres or 63 more than in the last year, and the total income amounted to Rs. 3,148. The sewage was last year leased on contract, the contractor being bound to recover Rs. 10 per acre for plots near the city and Rs. 6 and Rs. 4 for more distant fields. In Delhi 23 acres were irrigated by sewage and Rs. 8 per acre were paid by cultivators. In Ludhiána 36 acres were under irrigation and Rs. 4-10 0 per acre were paid. In Lahore 203 acres were irrigated by sewage or 36 acres more compared with last year, and the average rate realized was Rs. 15 per acre. It is hoped that the area under sewage irrigation will shortly be increased. In Gujránwála 30 acres of land were irrigated by sewage, and the average rate, Rs. 7-13-0 per acre, was realized for the use of the sewage.

Clearance and repairing of wells.

415. During the year 5,771 wells were cleared and 1,523 parapets constructed at a cost of Rs. 34,242, showing a considerable increase as compared with the previous year.

Sanitary note-books.

416 In several districts village sanitary note-books have been introduced, and it is intended to extend the system.

Vaccination.

417. The total number of vaccinations performed by all establishments during the year 1902-03 amounted to 667,544 against 668,144 in the preceding year. The total cost of the Department was Rs. 93,700, and the cost per successful case was annas two and pies six, or one pie less than in the previous year. **Total vaccinations.**

418. There was a very satisfactory increase in the primary operations done by the District Staff, and the number amounted to 547,521, or 95,832 more than in the previous year. The increase occurred in most of the districts. Vaccination was carried on in the plague-infected districts, and there was a marked increase in the work, notably in Gurdáspur and Siálkot, in which it amounted to 15,498 and 11,993. The increase was also very great, *viz.*, between six and nine thousand, in the primary vaccinations performed in the districts of Dera Gházi Khán, Lahore, Ambala, Hoshiárpur, Gujrát and Ferozepore. The re-vaccinations done by the District Staff showed a decrease of 59,966, the number performed during the year was 79,132 against 139,098 in 1901-02. This was due chiefly to the great decrease of 37,871 in the district of Kángrà owing to the opposition of the people on the ground that re-vaccination was in reality an anti-plague inoculation. The percentage of successful primary operations done by the District Staff was 95·92 against 95·41 in 1901-02, and of successful re-vaccinations 61·01 and 59·1 respectively. **District Staff.**

419. This staff performed a total of 34,288 operations during the year, or 36,978 less than in the previous year, a decrease of 24,471 in the primary operations and 12,507 in re-vaccinations. As in the hilly district of Kángra, an idea originated among the people of the Simla Hill States, in which the Vaccinators of the Special Staff are employed during the summer months, that plague inoculations were to be carried on under the guise of vaccination, and on account of their opposition the Vaccinators could do very little work until their services were utilized in the surveillance of arrivals from plague-infected areas in the plains into Simla Of the primary vaccinations performed by the Special Staff 85·99 per cent. were successful against 81·89 in the previous year; the percentage of success in re-vaccinations was 51·84 compared with 51·5 in 1901-02. **The Special Staff.**

420. The primary operations performed by this staff were 3,909 and re-vaccinations 2,488 as against 3,739 and 1,692 in 1901-02. The percentage of success in primary vaccinations was 92·04 and in re-vaccinations 72·39, the percentages in the previous year being 92·75 and 71·75 respectively. **The Cantonment Staff.**

421. There were only 206 vaccinations performed by the Dispensary Staff, of which 110 were primary and 96 secondary. The percentage of success was 99·09 in primary vaccinations and 96·88 in re-vaccinations. The primary vaccinations and re-vaccinations performed in the Patiála State were 45,088 and 9,707, in Kapurthala 6,207 and 39, in Fáridkot 4,289 and 1,632, and in Nábha 865 and 1. In Patiála the percentage of success in the primary vaccinations was 98·63 and in re-vaccinations 43·96, in Kapurthala 96·21 and 53·85, in Faridkot 97·58 and 89·88, and in Nábha 88·68 and 100. The Deputy Sanitary Commissioner carried out experiments on vaselinated and glycerinated vaccine pulp asked for by the Government of India. As there was more to be done with regard to the bacteriology of vaccine, the Sanitary Commissioner asked to be allowed to carry out further investigations, especially as to the effect of chloroform and heat in purifying vaccine of extraneous germs. **The Dispensary Staff.**

Chemical Examiner.

Report of Chemical Examiner.

422. The work for the past five years shows the following result :—

Year.	Cases.	Articles.
1898	994	3,614
1899	1,047	3,473
1900	1,020	3,846
1901	775	2,750
1902	932	3,612

Although several districts have been severed from the Punjab since 1898, the number of cases referred to the Chemical Examiner in 1902 was only 62 less than in the year mentioned, and the articles examined 2 less. The difference between 1902 and the year immediately preceding it is marked. The figures probably indicate greater readiness on the part of investigating officers to refer to Lahore in cases of doubt or suspicion. Arsenic is practically *the* poison used in cattle crime. In about 64 per cent. of human poisoning it is also the agent. Opium was detected in only 18·75 per cent. of the human cases, compared with 25·61 per cent. in 1901. There was a remarkable rise of alcohol as an agent in 1902 from 0·67 to 6·64.

CHAPTER VII.

INSTRUCTION.

[Detailed information on the subject of Education will be found in the Annual Reports on Public Instruction in the Punjab and in the statistical tables appended thereto, also in the tables under X—Education in the yearly volumes of Judicial and Administrative Statistics of British India published by the Director-General of Statistics. Under heading XII of the same volume statistics of printing presses and newspapers are given.]

General System of Public Instruction.

Public Instruction.

423. The general system and history of Public Instruction in the Punjab was explained in last year's report (paragraphs 616—635). It will not be treated again till 1911-12.

Education.

General Summary.

Total figures.

424. The number of Public Institutions was 3,230 with 193,529 pupils, and of these 238 were in Native States with 14,610 pupils, and 2,992 in British Territory with 178,919 pupils. Compared with the figures for 1901-02, there were 5 more Public Institutions and 843 more pupils in Native States, while in British Territory these institutions have decreased by 11 and the number of pupils by 3,384. The number of Private Institutions in Native States has risen from 859 to 928, or by 69, and of pupils from 8,510 to 9,050, or by 540. The number of these institutions in British Territory has also increased from 3,850 to 3,897, or by 47, and the number of pupils from 65,820 to 66,960, or by 1,140. Taking Public and Private Institutions together, there is an increase of 74 schools and 1,383 pupils in Native States; institutions in British Territory have increased by 36, while the pupils have fallen by 2,244. The number of girls under instruction has risen by 85 in Native States, and is now 1,760; and in British Territory by 2,369, the number being 27,069 against 24,700 last year.

Colleges.

425. There are 17 Colleges—14 in British Territory and 3 in Native States. Last year there were 16 in British Territory, but 2 Colleges have been closed. The 3 Arts Colleges in Native States had 89 students against 92, and the Arts Colleges (English) in British Territory returned 1,138 students against 1,244 the previous year. The Oriental College, Lahore, had 85 students against 87, and the Oriental Department of the Patiála College (returned for the first time) had 45 students. The numbers in the Law College have decreased by 5, while those of the Medical College have risen by 35.

Secondary Schools.

426. In British Territory the number of Secondary Schools for boys has fallen from 351 to 300, and they contain 5,295 less pupils than in 1901-02; for girls there are 32 against 34, or 2 schools less than during the previous year, and the attendance has also decreased by 218. The total number of Secondary Schools was 332 against 385, and the number of pupils 59,961 against 65,474, showing a decrease of 53 schools and 5,513 pupils. The number at the High stage was 3,745 against 3,898, at the Middle stage 17,882 against 18,912, and at the Primary stage of Secondary Schools 38,334 against 42,670. In Native States Secondary Schools have risen from 49 to 51, and the pupils from 7,521 to 7,604.

Primary Schools.

427. In British Territory the number of Primary Schools for boys has increased by 32, and they contain 1,341 more pupils than last year. Primary Schools for girls have increased by 8 and the pupils by 586. Altogether there were 2,623 Primary Schools against 2,583 in 1901-02, with 114,924 pupils against 112,997, which shows an increase of 40 schools and 1,927 pupils. Add to these 38,334 reading in the Primary Departments of Secondary Schools, the total number in receipt of Primary education was 153,258 against 155,667. In Native States Primary Schools have increased by 9, and the number of pupils by 906. The number of girls receiving instruction has risen by 85.

Special Schools.

428. The number of schools for Special Instruction in British Territory has risen from 19 to 23, and the number of pupils from 2,085 to 2,356, an increase of 4 schools and 271 pupils. Four of these with 269 pupils are for girls. In Native States there is one Special School with 10 pupils.

Private Institutions.

429. In British Territory Private Institutions show an increase of 47 (an increase of 55 in boys' schools and a decrease of 8 in girls' schools). The attendance shows an increase of 1,217 boys, but a decrease of 77 girls. Four schools for Europeans, with 93 pupils, are included. In Native States Private Institutions have increased by 69, and the number of pupils by 540.

Fees.

430. The total income from Fees rose from Rs. 9,35,221 to Rs. 9,46,649, or by Rs. 11,428. The expenditure was 26·43 per cent. of the whole, compared with 28·74 per cent. last year. The income from Tuition Fees alone fell from Rs. 7,24,639 to Rs. 7,12,242, or by Rs. 12,397; while the income from "Other Fees" rose from Rs. 2,10,582 to Rs. 2,34,407, or by Rs. 23,825.

In Native States the income from Tuition Fees was Rs. 10,771 and from "Other Sources" Rs. 5,994.

PUBLIC EXAMINATIONS.

Arts Examinations.

431. In the Intermediate Examination (Arts) there were 559 candidates, of whom 249 passed, or 44·5 per cent., against 338 passes out of 610 candidates, or 55·4 per cent, in 1901-02. On the Oriental side there were 4 candidates, of whom 3 passed, and on the Science side 11 appeared and 9 passed. One candidate from Bishop Cotton School, Simla, appeared in the First Arts Examination of the Calcutta University, but failed. In the B. A. Examination 126 passed out of 291 candidates, or 43·3 per cent., compared with 136 passes out of 328 candidates, or 41·5 per cent., in 1901-02. In the B. O. L. Examination 2 out of 5 candidates were successful, against 2 out of 4 in 1901-02. In the B. Sc. Examination 2 out of 3 candidates passed, against 2 out of 2 last year. In the M. A. Examination 14 out of 35 candidates were successful, against 23 out of 34 last year. For the M. O. L. Examination one candidate appeared, but failed. On the Arts side the total number of candidates was therefore 885 against 984, with 389 passes against 505. Of College candidates, 324 passed out of 646, or 50·1, against 413 out of 717, or 57·6 per cent., in 1901-02. Of private candidates, 65 passed out of 239, or 27·2, against 92 out of 267, or 34·5 per cent., last year. Excluding all candidates other than those presented by the Provincial Colleges, the percentage of successful candidates is in the Intermediate Examination (Arts and Science Faculties) 48·9 against 63·05 last year; in the B. A. Examination (Arts and Science Faculties) 51·4 against 47 last year; and in the M. A. Examination 46·6 against 65·2 in 1901-02.

Oriental Language Examinations.

432. In the Oriental Language Examinations the number of candidates rose from 424 to 505, and the number of passes from 238 to 252.

Law Examinations.

433. In the Preliminary Examination in Law 28 candidates out of 41 passed, against 53 out of 62 in 1901-02; in the First Certificate Examination 20 out of 41 candidates were successful, against 29 out of 51; and in the Licentiate Examination 22 out of 38, against 38 out of 50. On the Degree side 22 out of 27 passed the Intermediate Examination, against 22 out of 31 in 1901-02; and 18 out of 55 passed the LL. B. Examination, against 22 out of 65. Altogether 110 out of 202 candidates were successful, compared with 165 out of 260 in 1901-02.

Medical Examinations.

434. In the Preliminary Scientific Examination 37 out of 54 candidates passed; in the First Examination for Licentiate in Medicine and Surgery 22 out of 25 passed; and in the Second Examination 20 out of 37. On the Degree side the only candidate for the Preliminary Scientific Examination for Bachelor in Medicine passed; in the First Examination for M. B. 3 candidates appeared and all passed; and in the Second Examination 2 candidates appeared, but both failed. Altogether 83 out of 122 candidates passed in the Medical Examinations.

Engineering Examination.

435. In the First Examination in Civil Engineering 24 out of 37 candidates passed, against 27 out of 43 in 1901-02.

Examination Results, Entrance.

436. In the Entrance Examination (Arts, Oriental and Science Faculties), as well as the Clerical and Commercial Examination, 1,146 out of 1,937 candidates passed, or 59·2 per cent., against 867 out of 1,657, or 52·3 per cent., in 1901-02. There were 6 candidates on the Oriental side of the Entrance Examination, and of these 2 passed. The figures given above include 41 passes out of 48 candidates for the High School Examination for European Schools. Unaided Schools passed 60·5 per cent. of their candidates, Aided Schools 59·7 per cent., and Government and Board Schools 57·9 per cent. Thirteen out of 36 candidates passed the Entrance Examination, Science Faculty, 11 candidates being from schools in Lahore; these took up Drawing as an optional subject.

In the Clerical and Commercial Examination 19 out of 44 candidates passed, against 12 out of 33 in 1901-02, and of these 10 passed in Shorthand writing.

Examination Results, Middle School.

437. In the Middle School Examination 3,083 out of 5,184 candidates, or 59·4 per cent., were successful, against 2,831 out of 5,357, or 52·8 per cent., in 1901-02. On the Anglo-Vernacular side 2,090 passed out of 3,623 candidates, or 57·7 per cent., against 1,874 out of 3,786, or 4·95 per cent., last year; and on the Vernacular side 993 passed out of 1,561, or 63·5 per cent., against 957 out of 1,571, or 60·9 per cent. In addition to these 347 out of 372 candidates who took up English only passed.

University Education.

Arts Colleges.

438. The Victoria College at Lahore and the M. B. College, Amritsar, were closed during the year, the former for want of support and recognition; so that there are now 11 Arts Colleges in the Province within British Territory.

There has been a fall in the numbers attending Arts Colleges from 1,244 to 1,138. In the First Year Classes there were 327 against 424; in the Second Year Classes, 438 against 457; in the Third Year Classes, 155 against 122; in the Fourth Year Classes, 181 against 214; and in the M. A. Classes, 37 against 27.

Oriental College, Lahore.

439. The number of students on the rolls of the Oriental College on 31st March 1903 was 85 against 87 in 1901-02. In the School Department there were 54 against 44. Of the pupils in the College Department 31 were Hindús, 50 Muhammadans, 3 Sikhs, and one was a Native Christian. Seventeen students were reading for the Intermediate and Degree Examinations, the others reading for the Oriental Titles Examinations. In the School Department 11 were preparing for the Entrance Examination. There were 111 students learning English.

Secondary Education (Boys).

Number and Classification of Schools.

440. The number of Secondary Schools, European and Native, has fallen from 351 to 300, a large number of inefficient institutions having been struck off the list of Public Schools. Except for one Unaided Vernacular School, the decrease is entirely in Anglo-Vernacular Schools, and includes 54 Unaided Institutions (13 High and 41 Middle), while Aided Schools have increased by 4. Of the 300 schools 189 are Anglo-Vernacular and 111 Vernacular; and according to grade 86 are High Schools (85 Anglo-Vernacular and one Vernacular), and 214 are Middle Schools (104 Anglo-Vernacular and 110 Vernacular).

Number of Pupils.

441. There has also been a falling-off in numbers at the Secondary stage of instruction from 22,188 to 20,988, a decrease of 1,200. Of this decrease Anglo-Vernacular Schools account for 1,134 and Vernacular Schools 66. At the High stage the decrease is 174 and at the Middle stage 1,026. In addition to the above there are 36,295 boys in the Primary Departments of Secondary Schools against 40,390 last year, and of these 11,762 against 13,254 are learning English. Altogether, there are 57,283 boys in Secondary Public Schools, compared with 62,578 in 1901-02, and of these 27,389 are learning English against 30,003. The number of agriculturists in Secondary Departments is 5,010 against 5,056, and in Primary Departments 8,934 against 9,398; this gives a total number of 13,944 agriculturists reading in Secondary Schools, against 14,454 in 1901-02. The decrease in numbers is due partly to the effects of plague, and partly to the exclusion of unrecognized institutions from the list of Public Schools.

PRIMARY SCHOOLS (BOYS).

Number and Classes of Schools.

442. The number of schools has risen from 2,257 to 2,289, or an increase of 32, mainly in Aided Schools. Of the 2,289 schools 1,624 are Government and Board, 544 Aided, and 121 Unaided. A large proportion of the increase in Aided Schools is on account of Indigenous and Elementary Schools, mostly in the Ráwalpindi Circle. The number of Zamíndári Schools is 186 against 184 last year.

Number and Distribution of Scholars.

443. The number of boys attending these schools has risen by 1,341, the figures being 102,056 compared with 100,715 last year. The increase is chiefly in Board Schools. There are 16,411 at the Upper Primary and 85,645 at the Lower Primary stage. There is a satisfactory increase in the number of agriculturists in these schools; the figures are now 51,091 against 48,622 last year, an increase of 2,469.

Zamindari Schools.

444. The number of Zamíndári Schools has gone up from 184 last year to 186, with a corresponding increase in the roll of scholars from 5,562 to 5,853; and of these 3,832 are agriculturists, or 222 more than last year. There are 891 at the Upper Primary and 4,962 at the Lower Primary stage of instruction. Urdu is the medium of instruction in all the schools except 9, where Nágri is taught.

Schools for Low-caste Children.

445. The schools for the education of low-caste children now number 38 with a roll of 774 scholars. There are also 273 low-caste boys reading in ordinary Board Schools. In the Delhi and Jullundur Circles these are not generally permitted to mix with boys of higher caste, but in Mooltan no such distinction is made. There are two low-caste schools maintained by the Jhang Bar Mission in the Chenab Colony, attended by 36 Christian converts from the Chúhrás.

TRAINING INSTITUTIONS.

Number and kind of Institutions.

446. The Training Institutions in this Province are the Central Training College, Lahore, where students are prepared for English Masterships in all departments of schools and for Vernacular Masterships in Secondary Departments; and the five Normal Schools at Lahore, Delhi, Mooltan, Jullundur and Ráwalpindi, where students are prepared for Teacherships in Primary Schools and Departments. There are no special Training Schools for girls, but Training Classes are attached to several schools.

Central Training College.

447. The number of students attending the College at the close of the year was 85 compared with 76 last year. The Senior Anglo-Vernacular Class consisted of 5 teachers, 21 stipendiaries, and 2 non-stipendiary students; the Junior Anglo-Vernacular Class of one teacher and 24 College stipendiaries; the Senior Vernacular Class of 8 teachers, 24 College stipendiaries, and 3 stipendiaries of the Hoshiárpur District Board. Of the admissions to the Senior Anglo-Vernacular Class 2 students had previously passed the Junior Anglo-Vernacular Certificate Examination, and all admitted to the Senior Vernacular Class had passed the Junior Vernacular Certificate Examination in the First Division.

The results of the Certificate Examinations were satisfactory. From the Senior Anglo-Vernacular Class 28 students appeared, of whom 17 passed in the First Division and 6 in the Second. From the Junior Anglo-Vernacular Class 25 students were examined, of whom 6 passed in the First Division and 14 in the Second Division. From the Senior Vernacular Class 32 students appeared for examination, of whom 16 passed in the First Division and 13 in the Second. Of private students 19 appeared for the Senior Anglo-Vernacular Examination, of whom 5 passed in the First Division, 5 in the Second Division, and one passed in the one subject in which he failed at a previous examination. Fifteen private candidates appeared for the Junior Anglo-Vernacular Examination, of whom one passed in the Second Division and one passed in the one subject in which he had previously failed. For the Senior Vernacular Examination there were 8 private candidates, of whom one passed in the Second Division and 2 passed in the one subject in which they had previously failed.

The results of the Drawing Examination were not so satisfactory as last year. Eighty-three students were presented for examination, of whom 43 were successful, or about 51 per cent. The failures were chiefly in Freehand Drawing from the Flat, and Plant and Blackboard Model Drawing. Since the close of the year under report seven Drawing Masters have been appointed to the Training Institutions of the Province.

The College Time-Table provides for three hours a week to be devoted to Drill and Gymnastics and one hour a week to instruction in the Principles of Physical Training. The results of the examination for Gymnastic Instructors were very disappointing. For the Senior Certificate only 3 passed out of 11 candidates, and for the Junior Certificate only 2 out of 63 candidates passed. The candidates for the Senior Examination were deficient in Drill, and those for the Junior in Gymnastics and to a less extent in Drill.

Normal Schools.

448. There were 255 students in the five Normal Schools during the year, and all but one were Government stipendiaries. Of these 91 were sent by Inspectors of Schools for training. Sixteen students were being trained for work in Zamíndári Schools, and the remaining 239 for work in ordinary Primary Schools. Last year there were 261 students in training in these schools.

Two hundred and seventy-five candidates appeared for the Junior Vernacular Certificate Examination, of whom 242 were from the Normal Schools and 33 were private candidates. Fourteen private candidates and 189 from Normal Schools were successful in the examination, compared with 29 and 199, respectively, in the previous year. Geography and Arithmetic were the weak subjects this year, and accounted for 58 failures as against 15 for the rest of the subjects taken together. The percentage of passes from Normal Schools is 78 compared with 80 in 1901-02, which is a satisfactory result. There were no failures in the Practice of Teaching, and only one in each of Urdu, Persian and Agriculture. Mathematics accounted for 8 failures and School Management 4. The percentage of passes from the several Normal Schools is—Delhi 74·5 against 67 last year; Jullundur 79·1 against 83: Lahore 83·6 against 90; Ráwalpindi 72·3 against 74; Mooltan 80·6 against 86: the Lahore Normal School again showing the best result.

Twenty-four candidates appeared for the Zamíndári Certificate Examination, of whom 16 were from the Lahore Normal School, 7 from the Central Training College, and one was a private candidate; all but the private candidate were successful.

Practical instruction in Agriculture continues to be given in Normal Schools. A part of the compound is usually set aside on which the students are encouraged to grow the season's crops and to note carefully the method of preparing the soil, dates of sowing, reaping, &c., &c.

Training of Female Teachers.

449. There were 37 girls under training during the year as Female Teachers, and all were in receipt of stipends. Of the 37 girls 7 were in training in the M. B. Girls' School, Amritsar, 4 in the Christian Girls' School, Amritsar, 8 in the Alexandra Girls' School, Amritsar, 8 in the Victoria Girls' School, Lahore, and 10 in the American Presbyterian Mission Girls' School, Gujránwála. The expenditure on stipends was Rs. 1,368 compared with Rs. 1,195 in 1901-02. Three candidates appeared for the Junior Anglo-Vernacular Certificate Examination, of whom one passed in the Second Division. In the Senior Vernacular Certificate Examination 14 candidates appeared, of whom 8 passed,—2 in the First Division and 6 in the Second. In the Junior Vernacular Examination 10 candidates appeared, of whom 5 passed, all in the Second Division. These results are an improvement on last year's results.

The number of Female Teachers is 568 compared with 577 last year. Of these 120 are certificated, although only 54 are trained teachers.

PROFESSIONAL EDUCATION.

The Medical School, Lahore.

450. At the end of the year there were 313 students in the Medical School, Lahore, against 291 last year, the applications for admission in April last being greatly in excess of the number it was possible to admit. The number of free students attending the School continues to be very large, *viz.*, 133. In the Final Examination for the Hospital Assistant Diploma held in March 1903, 92 candidates appeared, of whom 60, or 65·2 per cent., passed, compared with 28 passes out of 64 candidates last year. In the Junior Examination for the same diploma, 115 students appeared, and 85, or 73·9 per cent., passed, against 64 passes out of 74 candidates last year.

North India Medical School for Christian Women, Ludhiana.

451. This School had 49 students on its rolls at the close of the year, against 44 last year; and of these 20 belonged to the Medical Class, 6 to the Compounder Class, 15 to the Nurses Class, and 8 to the Dháís. Thirty-four were receiving instruction through the medium of English, and 15 were reading in the Vernacular.

Madrassa Tibbiya, Delhi.

452. This School teaches the Yunáni system of medicine through the medium of Arabic, and arrangement is also made for lectures on Anatomy and Surgery by an English Doctor. At the close of the year there were 91 students on the rolls against 100 last year, and of these 87 were Muhammadans and 4 Hindús.

Vedic and Yunani Classes.

453. The Vedic Class of the Dayánand Anglo-Vedic College continues to be maintained, but the want of an Aushadálya (where medicines can be dispensed gratis to patients) is greatly felt; without this the students can acquire no practical knowledge, whether of medicines or diseases. It had 9 scholars on the rolls at the close of the year; while the Yunáni Class attached to the Islámia College, Lahore, had 21 scholars.

TECHNICAL EDUCATION.

Mayo School of Art.

454. The number of boys on the rolls of the Mayo School of Art, Lahore, at the close of the year was 302, which shows no advance on the previous year.

Of the 28 students who left the school during the year, 17 obtained employment as Overseers and Sub-Overseers, 6 as Drawing, Carpentry and Blacksmith Masters, 2 as Draftsmen, one as Surveyor, and one as a Mistri.

Railway Technical School.

455. The Railway Technical School, Lahore, had 382 on its rolls at the close of the year, against 401 last year, and of these 34 were in the Middle Department, 94 in the Upper Primary, and 254 in the Lower Primary. The

results of examination on both the General and Technical sides were, on the whole, satisfactory. During the year 13 boys left the Middle Department and 31 the Upper Primary. Of the boys who left the Middle Department, one reads in the Engineering School, Karáchi, and one in the Central Model School, 2 joined the Railway Workshops, and 3 joined the Railway Printing Press.

Clerical and Commercial Classes.

456. The Commercial Classes formed in 1901 in connection with the Municipal Board High School at Rewári show some improvement. Two of the 3 candidates passed the Clerical and Commercial Examination. The Commercial Class in connection with the Hoshiárpur Municipal Board High School continues to be maintained in two sections. The Senior Class had 4 and the Junior 7 boys at the close of the year. The Commercial Class of the Municipal Board Brandreth High School, Gujránwála, has been closed on account of the small attendance. The experiment of linking the Clerical and Commercial Classes to the Municipal Board High School, Amritsar, having proved a failure, these classes were again formed into an independent and special school. The total number on the rolls was 46 against 36 last year, of whom 27 learn Shorthand. The expenditure was Rs. 4,161 against Rs. 3,660, and of this Rs. 1,262 was met from Fees. The Clerical and Commercial Class attached to the Mission School, Ráwalpindi, is progressing satisfactorily. A Senior Class has been opened during the year. The Shorthand Class with 21 pupils and the Drawing Class with 18 pupils in connection with the Municipal Board High School, Ludhiána, continued till the close of the year; but since then the Shorthand Class has ceased to exist for want of a teacher. From the Drawing Class two boys took up Drawing in the Middle School Examination and passed. From the Shorthand Class 7 out of 8 passed the Third Class Examination in Phonography, held in December 1901, and 3 out of 3 the Theory Examination. In the corresponding examinations held in June 1902, 3 out of 4 and 3 out of 6, respectively, were successful.

FEMALE EDUCATION.

Number of Schools and Scholars.

457. The number of Public Schools for girls has increased from 360 to 366, and the number of pupils attending them from 15,178 to 15,546, an increase of 368. Including 9,494 girls in Private Schools and 269 in Special Schools, the total number of girls under instruction is 25,309 against 26,580 last year. There are 201 Government and Board Schools, 146 Aided Schools and 19 Unaided Schools, against 197, 138 and 25, respectively, in 1901-02. One thousand seven hundred and ninety girls were learning English against 1,734 last year, and of these 304 were natives.

Results of Examinations of Native Girls.

458. For the Entrance Examination 28 girls appeared, of whom 25 passed compared with 25 candidates and 21 passed last year. Ninety-two candidates appeared for the Middle School Examination and 61 passed. In 1901-02 there were 99 candidates for this examination, of whom 68 were successful. For the Middle Standard Examination 43 candidates appeared (all Vernacular), of whom 33 passed, or about 77 per cent., compared with 46 candidates and 35 passes in the previous year. In the Upper Primary Examination 373 out of 560 candidates passed, or about 67 per cent., compared with a percentage of 71·6 successful candidates last year. In the Lower Primary Examination 709 out of 1,142 girls passed, or about 62 per cent., compared with 747 passes out of 1,166 candidates in 1901-02.

EDUCATION OF PARTICULAR CLASSES.

Europeans. Number of Pupils.

459. The number of Public Schools for Europeans still stands at 37, but the number of pupils has risen from 2,451 to 2,538. Of these schools 17 are for boys, with 1,101 pupils; and 20 for girls, with 1,437 pupils. The number of Private Schools has fallen from 6 to 4 with a decline in the number of pupils from 122 to 93. Two of these schools are for boys with 30 scholars and 2

for girls with 63 scholars. The number of both Public and Private Schools is 41 with 2,631 pupils, compared with 43 schools last year with 2,573 pupils. Of the 2,631 pupils attending schools 1,131 are boys and 1,500 girls, against 1,019 boys and 1,554 girls last year.

Examination Results.

460. As in 1901-02, one boy from Bishop Cotton School appeared in the F. A. Examination of the Calcutta University, but was unsuccessful. Three girls from Auckland House Girls' School appeared in the Entrance Examination of the Calcutta University; all were successful. There were no candidates from Public Schools for the Entrance Examination of the Punjab University. In the High School Examination 41 passed out of 48, or 85 per cent., against 39 out of 51, or about 76 per cent., last year. In the Middle School Examination 87 passed out of 140, or 62 per cent., against 83 out of 151, or about 54 per cent., in the previous year. In the Primary School Examination 155 were successful out of 276, or 56 per cent., compared with 231 out of 281, or over 82 per cent., in 1901-02.

Muhammadans.

461. The number of Muhammadans receiving instruction has during the year risen from 111,350 to 111,616, an increase of 266. The Hindús have, however, fallen in numbers from 106,938 to 104,721, *i.e.*, by 2,217; and the Sikhs from 23,008 to 22,439, *i.e.*, by 569. In Public Schools the number of Muhammadans, boys and girls together, has increased from 68,674 to 68,774, or by 100, there being now 64,615 boys against 64,569, and 4,159 girls against 4,105. There has also been an increase of 743 in the number of boys attending Private Schools, the figures being 35,900 against 35,157; but there has been a falling off in the girls of 577, the numbers being 6,942 against 7,519.

The Aitchison Chiefs' College.

462. The number of pupils at the close of the year was 67, or 3 more than last year; and of these 2 were reading in the Government College, Lahore, 14 in the High, 29 in the Middle, and 22 in the Primary Departments. Thirty-eight students paid fees, and 30 were scholarship-holders. The instructional state of the institution is satisfactory; and the results of the examinations are reported to be excellent in the Upper Primary and fair in the Middle and High Departments. The receipts during the year amounted to Rs. 1,01,359, which includes a Government grant-in-aid of Rs. 9,000, compared with Rs. 1,16,265 in the previous year.

Private Schools.

463. Private Schools are those which do not accept the standards of instruction prescribed by the Department or the University, and which do not submit to any public test. These are chiefly Indigenous Schools. The total number of Private Schools has risen from 3,850 in 1901-02 to 3,897 during the year under report and the number of scholars attending from 65,820 to 66,560. There is an increase of 2,485 in the numbers attending "Other Schools," while the Vernacular and Rote Schools show a decline in numbers of 1,382.

MISCELLANEOUS.

Education in Native States.

464. There are still 3 Arts Colleges in Native States, *viz.*, at Patiála, Baháwalpur and Kapurthala, though the Patiála State has this year for the first time returned an Oriental College, which is not a separate institution, but a department of the Arts College. These Colleges contained 89 students against 92 last year. There are 234 Public Schools against 230 in 1901-02; and of these 51 are Secondary with 7,604 pupils, 182 are Primary with 6,907 pupils, and one is a Special School with 10 pupils; this gives a total of 14,521 pupils compared with 13,675 in 1901-02. The reduction in the number of Special Schools is accounted for by the fact that last year some schools in the Baháwalpur State were shown as Special Schools which should properly have been returned as Indigenous Advanced Schools. The number of Private or Indigenous Schools has increased from 859 to 928 and the number of pupils attending from 8,510 to 9,050. In both Public and Private Institutions the number under instruction is 23,660 against 22,277 last year; and of these 1,760 are girls against 1,675 in 1901-02. The number learning English is 3,840 compared with 3,569 last year. The total male population of the Native States is 2,409,809, so that one in 110 is under instruction as against one in 72 under instruction in British Territory.

Discipline and Moral Training.

465. In Colleges the conduct of the students was good on the whole, and discipline was strictly maintained. Four serious cases of breach of discipline were reported from the Government College, Lahore, and one case occurred in the Khálsa College, Amritsar; the offenders were expelled. Inter-College rules, which up to the end of the year were observed only by 4 Arts Colleges in Lahore and St. Stephen's College, Delhi, have since been revised and approved by the Punjab University and sanctioned by the Local Government for adoption in all recognised Colleges of the Province. The experiment of a system of inter-collegiate lectures is now being tried in connection with the Government and Forman Christian Colleges at Lahore; the significance of this measure can hardly be over-estimated. In Schools there are Teachers' Associations, Students' Clubs and Debating Societies; these agencies, together with the greater supply of trained and well-qualified teachers, the increase in the number of denominational and sectarian schools in which religious instruction is imparted along with secular, the growing interest in out-door games, the exercise of close personal supervision on the part of teachers, and the stricter discipline in boarding-houses, have exerted a healthy influence on the manners, conduct and character of students. The meetings of the Teachers' Associations in the Lahore and Amritsar Districts were again irregular owing to the prevalence of plague. Most of the Colleges have their own Debating Societies which have met regularly. The Shakesperian Society of the Central Training College met during the summer months, and has been a success. The "Old Students" Associations are also very popular. A Temperance Society has been started in connection with the Church Mission College, Amritsar.

Physical Training.

466. The importance of physical training is recognised everywhere, and except in some unaided institutions it is receiving attention. In all Circles the Inspectors report that the gymnastic apparatus is incomplete in many schools, and that the want of adequate play-grounds is generally felt. Drill and gymnastics are regularly practised, especially in Board and Aided Schools. Native games are played, particularly in the Ludhiána District, and there is a growing interest in such games as cricket, football, tennis and hockey. District tournaments were held in all but the Lahore Circle; the Circle Tournament was not held in the Lahore, Jullundur and Ráwalpindi Circles on account of the prevalence of plague. In Colleges students are given every encouragement to participate in out-door games and exercises.

Boarding-Houses.

467. At the close of the year there were 291 boarding-houses for both Natives and Europeans with 10,131 inmates compared with 303 houses and 10,257 inmates last year. Of these 269 were for boys with 8,724 boarders, and 22 for girls with 1,407 boarders. There were 21 boarding-houses for Europeans with 1,520 in residence; and of these 8 were for boys with 613 inmates, and 13 for girls with 907 inmates. Of the 291 boarding-houses 12 are managed by Government, 175 by Local Bodies, 43 are aided by Government or Local Bodies, and 61 are unaided.

Text-Books.

468. The work of the past year may be summarized as follows:—The six stories selected from Poole's Woman's Influence in the East in connection with the Punjab Literary Series were translated into Urdu and the Urdu translations of Sir Robert Ball's *Starland* and Mrs. Hendley's *Hygiene, Personal and Domestic*, were seen through the Press. The revised draft of the Urdu translation of Sir Edwin Arnold's *Seas and Lands* was also approved and prepared for the Press. The question of suitable text-books in English for the Upper Primary Classes received attention. The Committee having advertized for suitable Manuals of Arithmetic in the Vernacular for Primary Schools, a number of books were received, and were under consideration; a text-book on Kindergarten was taken in hand; and steps were taken for the preparation of a number of songs appropriate for class purposes and suited to native airs. These songs will enable a beginning to be made in teaching music in Primary Schools. The revision of *Masáhat ki Kitáb* was arranged for with the view to eliminate matter comprised in the curriculumn laid down for Vernacular Middle Schools. Steps were also taken to revise the Courses of Physical Training in use in

Primary and Secondary Schools and Training Institutions, with the view to expand and improve the sections on Native Games and Exercises, with special reference to the scheme adopted in the Central Provinces. In order to increase the usefulness of the Agricultural Readers in use in Zamíndári Schools the *Kheti ki Tisri Kitáb* was revised so as to include therein the substance of a leaflet on "Manures," published by the Department of Land Records and Agriculture, United Provinces of Agra and Oudh. The contract for the printing and distribution of books and maps was held by the Mufid-i-'Am Press up to October 1902. Owing to the impending close of the contract the contractors printed far more copies of text-books than the demand warranted.

Literature and the Press.

Literature.

469. The total number of books and periodicals catalogued during the year 1902 is 1,233, or 29 more than last year. The number of publications the copyright of which has been registered during the year shows a falling off from 241 to 182. Urdu continues to have the largest number of publications, 521; Punjábi with 350 comes next. We find Punjábi written both in Gurmukhi and Persian characters. Gurmukhi Punjábi deals mostly with poetry and the Sikh religion. Works of more general interest are usually written in Persian Punjábi, as the Persian character is more universally known than Gurmukhi. Hindi has gone down from 94 to 66. Poetry claims 373 out of a total of 1,223 and religion 331. The plague has produced an increase of books on Medicine. There are one or two good biographies. There are some adaptations from Turkish works, which are a new feature, and there is one interesting diary of travel through Turkey and Egypt. On the whole there is a rise in the proportion of books of real worth.

Statistics of Newspapers.

470. There were 193 newspapers published in the Punjab and North-West Frontier Province during the year 1902. Of these 40 were published in English, 143 in Urdu, 6 in Hindi, 3 in Gurmukhi, and one in Gurmukhi and Urdu. Five English and 31 vernacular newspapers were started and 13 English and 17 vernacular ceased to exist during the year, leaving a total of 163 on the register. One was published yearly, 2 quarterly, 58 monthly, 31 twice a month, 4 three times a month, 84 weekly, 5 bi-weekly and one tri-weekly. There were 7 daily newspapers.

Prosecution.

471. There was one Press prosecution during the year, that of the *Akhbár-i-'Am*, for publishing a series of obscene articles under the heading of *Chu Chu ka Murabba*, or "The Hotch-potch Preserve." The trial was not concluded at the close of the year, but the accused, Pandit Gopi Náth, and his brother, Pandit Govind Sahái, the persons responsible for the publication of the *Akhbár-i-'Am*, were subsequently convicted on two charges under Section 292, Indian Penal Code, and sentenced as follows:—

Pandit Gopi Náth, the actual writer of the obscene articles,—one month's simple imprisonment in each case.

Pandit Govind Sahái, the joint proprietor and editor of the *Akhbár-i-'Am*,—10 days' simple imprisonment in each case.

Literary Societies.

Literary Societies.

472. This subject was reviewed in last year's report. It will not be treated again till 1911-12.

Arts and Sciences.

Lahore Central Museum.

473. The Museum maintained its popularity during the year 1902-03, the daily average of visitors having risen from 611 to 694. The reservation of one day in each month for zenána ladies continued to be appreciated. Owing to a special grant the Curator was enabled to make extensive and valuable additions to the Museum collection which were purchased at the Delhi Art Exhibition. Presentations were also received from various gentlemen. A special report regarding the Art Sale Room has been promised and will be noticed in next year's report.

CHAPTER VIII.

ARCHÆOLOGY.

474. A sum of Rs. 4,9132 was expended on works of preservation repairs and restoration of historical and archæological buildings during the year. **Money grant.**

475. The most important works undertaken were (1) the preservation of the tombs of Asaf Khán and Núr Jehán at Sháhdara near Lahore, and the mosque of Wazír Khán at Lahore, (2) special repairs to the palace in the Lahore Fort, the gateway of the Gulábi Bágh, the tomb of Dái Anga on the Sháhlimár Road, and the wall of the Sháhlimár Garden near Lahore ; and (3) the restoration of the marble sandstone inlay on the façade of Jehángír's Mausoleum at Sháhdara near Lahore was commenced, and the following works at Delhi and in its neighbourhood :—Urgent repairs to the tombs of Shams-ud-dín, Taga Khán at Nizám-ud-dín and the Zínat-ul-Masjid, the tanks in the garden of Safdar Jang and the inlaid marble tablet bearing the epitaph over the grave of Jahán Ara at Nizám-ud-dín. **Works done.**

A special case of private enterprise in the matter of archæology was the erection at his own expense by Pandit Bánke Rái of Delhi, through the agency of the Public Works Department, of four marble tablets, bearing the inscription in *Nágri* transcript and translations in English, Hindi and Urdu round the "Iron Pillar" at the "Qutb" near Delhi.

476. In the interests of epigraphical research the Superintendent of Archæological Survey, Punjab, made a tour in the Chamba State ; some valuable copper plates were collected, dating from the times of the founder of the present town of Chamba to the last century. The Archæological Surveyor also superintended explorations in the Pesháwar Valley in the neighbourhood of Chársadda, where some excavations were undertaken and were still in progress at the close of the year. **Tours made.**

477. Several photographs of buildings at Lahore, Delhi and in the Chamba State were taken during the year and drawings prepared. Preliminary lists of ancient monuments and inscriptions in the Lahore and Delhi Districts were completed and published as an appendix to the Archæological Surveyor's Annual Progress Report. **Records made.**

CHAPTER IX.

MISCELLANEOUS.

ECCLESIASTICAL JURISDICTION.

478. There is nothing to add to the information on this subject given in the report for the year 1901-02.

Ecclesiastical.

Ecclesiastical.

479. The various ecclesiastical institutions in the Punjab were noticed in last year's report. There is nothing fresh to add.

Stationery.

Consumption in Punjab Civil Offices.

480. The Punjab Administration depends on the Stationery Department, Calcutta, for its stationery requirements. The value of issues in 1902-03 to the officers in the Punjab aggregated Rs. 98,568, *viz.*, cost of printing paper Rs. 49,585, office stationery Rs. 48,576, and padlocks Rs. 407, against Rs. 85,437, Rs. 68,515 and Rs. 3,336 respectively in the previous year, aggregating Rs. 1,57,288.

Government Press.

Income and Expenditure.

481. The following statement compares the income and expenditure with the value of work turned out during the years 1901-02 and 1902-03 :—

INCOME.		EXPENDITURE.		VALUE OF WORK.	
1901-02.	1902-03.	1901-02.	1902-03.	1901-02.	1902-03.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
6,899	8,057	1,40,985	1,26,242	1,58,631	1,32,366

Growth of income.

482. The income of the Press during the year under report exceeded that of the preceding year by Rs. 1,158. In this connection it may be mentioned that there has been a steady advance in the income of the Press during the past five years, as will be seen from the figures given below :—

	Rs.
1898-99	3,496
1899-1900	3,784
1900-01	6,602
1901-02	6,899
1902-03	8,057

Expenditure.

483. The total expenditure amounted to Rs. 1,26,242 against Rs. 1,40,985 in the previous year, or a decrease of Rs. 14,743 over the figures of the preceding year. The figures for the year under report include a sum of

Rs. 5,052 paid to the Government Contractors and other private presses out of the Press grant, and if this item is deducted, the expenditure is reduced to Rs. 1,21,190.

Value of work.

484. The value of work turned out during the year was Rs. 1,32,366 against Rs. 1,58,631 in the previous year, or a decrease of Rs. 26,265 over the figures of the preceding year. This decrease is accounted for by (1) the reduction of work caused by the separation of the Frontier; (2) the general falling off in the amount of work sent to the Press; and (3) by a change in the system of charging for certain descriptions of work, suggested by the Examiner of Government Press Accounts.

Amount of work.

485. The total number of pages set up in all founts of type during the year under report amounted to 47,424 as against 62,255 in the preceding year, exclusive of work done by the Government Contractors and paid for out of the Press grant. The cost per *Pica* page was Re. 1-9-6 against Re. 1-7-9 in 1901-02, or an increase of 1 anna and 9 pies, which is due to the causes mentioned above.

Contract work.

486. The cost of work done by the Contractors for Government Printing for Departments and Offices during 1901-02 and 1902-03 was Rs. 73,953 and Rs. 69,731 respectively.

Machinery.

487. The machines and hand presses are in good working order. The Press was inspected by the Examiner of Government Press Accounts in 1901-02, and most of the reforms suggested by that officer have been carried out.

Punjab Government Press, Lahore—15-1-04—486.

PUNJAB ADMINISTRATION REPORT, 1903-1904.

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REPORT

ON THE

ADMINISTRATION

OF THE

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FOR

1903-1904.

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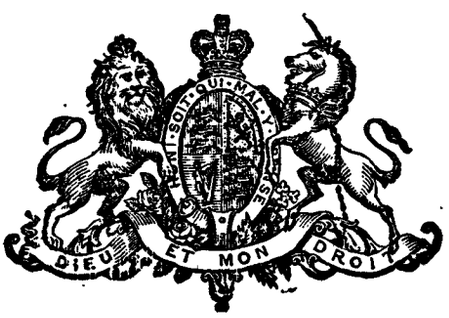

LAHORE:
PRINTED AT THE PUNJAB GOVERNMENT PRESS,
MCMIV.

PRINTED BY LALA SITA RAM,
SUPERINTENDENT, PUNJAB GOVERNMENT PRESS, LAHORE.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1903-04.

PART I.

GENERAL SUMMARY.

[The "year" throughout this report is not invariably the financial year ending 31st March 1904. At the heading of each chapter, with the exception of Chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in Chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March, in Chapter II it is the revenue year ending 30th September 1903, and in Chapters III and VI it is the calendar year ending 31st December 1903.

The Administration Report for 1901-02 was a decennial report and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of Part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.]

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir Charles Rivaz, K.C.S.I., held the office of Lieutenant-Governor throughout the year.

Changes in the Administration.

2. There have been no noteworthy changes in the Administration during the year.

NATIVE STATES.

Relations with Tributary States.

3. During November 1903 the Phulkián States and Baháwalpur were visited by His Excellency the Viceroy, who while at Baháwalpur, where His Honour the Lieutenant-Governor was also present, invested the Nawáb with the full powers of a Ruling Chief. This State was thereafter included in the Phulkián States Agency, which continues to be under the charge of Major

Dunlop-Smith, C.I.E. Mahárája Bhupendra Singh, the minor Chief of Patiála, has made good progress with his studies and is developing an intelligent interest in politics and contemporary events. He has, since the close of the year, entered the Aitchison College, Lahore, to complete his education. Rája Bhowáni Sen, whose succession to the Chiefship of the Mandi Sate was noted in last year's report, was formally installed on the gaddi by His Honour the Lieutenant-Governor, who specially visited Mandi for the purpose. The Rája is being instructed in his duties of government under the guidance of Mr. T. Millar, who has been appointed Superintendent of the State for two years. Rája Shám Singh of Chamba abdicated voluntarily in favour of his brother Mián Bhure Singh. Excellent progress was made in the Settlement operations in the Patiála State, which are under the control of Major Popham Young. In the autumn of 1903 new assessments were announced in the tahsíls of Bhatinda and Narwána. The financial condition of this State is now good.

Plague in Native States.

4. As is the case in the history of the British districts, so in the Native States, the plague epidemic raged during the year with greater virulence and over a wider area than in the previous year. The calamity was particularly severe in the States of Patiála, Jínd, Nábha, Kapurthala and Máler Kotla. The people in Jínd and Nábha are reported to be prompt to evacuate their houses on the first appearance of plague, and in Patiála to be less suspicious than formerly at the efforts of the authorities to assist them.

Agricultural conditions in Native States.

5. The agricultural conditions in the Native States were favourable, except in the Chamba State. In Baháwalpur the autumn harvest was the best that has been reaped for years. An extension of three of the existing canals in this State is now being carried on and will result when completed in an appreciable increase in the cultivated area.

CONDITION OF THE PEOPLE.

Effect of plague on labour.

6. For the first time the severity of the epidemic of plague caused an appreciable scarcity of labour. This difficulty was experienced especially in the early part of this year in the Shahpur District and in the Jhelum Colony; it was felt also elsewhere, but not to such an extent as to affect agricultural operations to a serious extent. The conduct of the people in face of this calamity, with the one exception of a riot in the Jullundur District, has continued good. The material prosperity of the people has been improved by recent good harvests.

ADMINISTRATION OF THE LAND.

Land Revenue.

7. The history of the Revenue Administration of the Province is brought under review in Part II of this report up to the end of September 1903 and relates to a period antecedent to that dealt with in the account given of the weather and crops in Chapter IV. The weather conditions which prevailed during the period on which the revenue of the year depended are described on pages 50 and 51 of the Administration Report for 1902-03. The seasons had not been entirely favourable and had resulted in a considerable failure of crops, especially in the Delhi Division. The worst sufferer was Hissar. Rohtak and Karnál suffered in the same way, but less severely. Only 34 per cent. of the land revenue demand of Hissar could be collected, and

some trouble in collecting was experienced in the Muktsar and Ferozepore Tahsíls, which have apparently not entirely recovered as yet from the demoralising effect of the famine years. Under these conditions the necessity of making considerable suspensions of land revenue was at once perceived. The actual suspensions made amounted to over 12 lakhs, and the remissions of land revenue were over a lakh. The greater part of the remissions, however, were composed of sums remitted under the general orders for the remission of famine arrears. These adverse circumstances did not seriously affect the Province as a whole, and no general difficulty occurred in realizing the revenue demand of the year. The net result shows a further expansion of the revenue of the Province, chiefly under the heading of fluctuating land revenue, and a very large temporary increase in miscellaneous land revenue from the proceeds of the auction of land and shop sites in the colonies. Recent revised orders regarding the policy of Government in the matter of suspensions and remissions are noticed in Chapter II and should result in greater promptness and more uniformity in dealing with cases of hardship due to calamities of season. It is satisfactory to note that the system of fluctuating assessment introduced into the Multán District at the recent settlement is now appreciated and that the system has also found favour elsewhere. The method of allowing for failed crops on the Jhelum and Chenab Canals, which is another extension of the principle of fluctuating assessments, has been simplified by the adoption of what has been called the four-anna eight-anna rule, which is based on the principle of the avoidance of over-refinement in estimating the amount of deterioration of a crop, and of generosity in remissions in the case of a really bad crop. The question whether this simplification of method should be extended to certain other canals is under consideration.

The Land Alienation Act.

8. It may be safely asserted that the Land Alienation Act has achieved its main object of placing material checks on alienations of land without unduly impairing agricultural credit and without causing any substantial depreciation in the value of land. At the same time it has had a highly beneficial effect in the direction of curbing the natural proneness of the Punjábi zamíndár to habits of profuse extravagance. One of the most satisfactory features of the present year's report on the subject is the fact that the money-lender is beginning to abandon his attitude of aloofness from all money-lending operations and that loans under the forms of mortgage permitted by the Act are becoming more common.

Surveys.

9. Good progress continues to be made by the Revenue Officers in demarcating Government waste and in laying down fixed boundaries under the Riverain Boundary Act. In order to complete this work, a riverain survey was commenced by the Survey of India (No. 18 Party) along the riverain tracts on the Chenab, Sutlej and Indus Rivers, where fixed boundaries have recently been laid down. The regular programme of operations of the Survey of India is also being continued. Good progress was made during the year in the surveys in various stages of completion in the Simla Hill States and in the districts of Montgomery, Lahore, Amritsar and Multán.

Settlements now in progress.

10. Six Settlement parties were engaged in settlement work in the Punjab during the year, *viz.*, at Muzaffargarh, Sirsa, Attock, Jhang, Háfizabad and Ráwalpindi, and three parties, whose work is also supervised by the

Settlement Commissioner of the Punjab, were employed in the North-West Frontier Province, *viz.*, in the old Dera Ismail Khan District, which now falls partly in the Punjab and partly in the new Province, Kohat and Hazára. The settlements of Muzaffargarh, Sirsa and the Punjab Tahsíls of the old Dera Ismail Khan District were completed during the year.

Chenab Canal Colony.

11. Some small extensions of the Chenab Canal commanding about 81,500 acres were in progress during the year. But some of this land is either not culturable or decidedly inferior, and colonists from outside are beginning to reject the land now offered to them, although it is readily taken up by those on the spot. Moreover, the canal has at present as much land to irrigate as it can manage. In short, although the allotted area was increased during the year by 72,268 acres, the limits of colonization on this canal with its present supply have practically been reached. A new district of Lyallpur comprising the greater part of the colony has recently been sanctioned, but the work of the Colonization Officer cannot on that account be dispensed with, as the technical work of dealing with the colonists, holding as they do on many different tenures with very diverse conditions, will take the whole time of the officer dealing with it. The internal development of this colony has been a work very arduous, but intensely interesting to those who have been engaged in it; and the experience gained has been most useful in dealing with the analogous case of the Jhelum Canal Colony. Large grain marts now exist in the colony, notably at Lyallpur, Gojra, Sángla, Chiniot Road and Toba Tek Singh. A much needed extension of the railway system and of road communication is likely to be a feature of the history of the colony in the near future. The total exports from the stations on the existing line of railway within the colony, in 1902, amounted to 418,472 tons, and this figure must now be considerably exceeded.

Jhelum Colony.

12. Colonization operations in the Jhelum Colony have been pushed on with much energy. Considerable progress has been made in the work of allotment. An ample number of applicants for grants on horse-breeding conditions have been secured without difficulty. The high price realized for the sale of shop sites at Sargodha and Bhalwál shows what an excellent reputation our colonies and their administration have achieved with the general public.

Court of Wards.

13. The new Punjab Court of Wards Act (No. II, Punjab, 1903) came into force on the 25th June 1903. The Financial Commissioner now occupies the position of Court of Wards for the whole Province instead of the Deputy Commissioners severally for the wards within their jurisdiction. There are now 44 estates under the control of the Court of Wards as against 43 in the year 1902. Most of the wards' estates were encumbered with debt when brought under the management of the Court. After defraying current expenses, including the payment of land revenue, cost of management and a proper provision for the maintenance of the wards and their households, the Court was able to pay off over 2 lakhs of debts during the year. An examination of the reports on the administration of the wards' estates would be instructive to those who maintain that the revenue assessments in the Punjab are excessive.

LEGISLATION.

14. The only Act which was passed during the year that requires mention is the Act to consolidate and amend the law relating to the Court of Wards which is mentioned above. The efficiency of management of wards' estates has been much improved by the passing of this Act.

Act II, Punjab, 1903.

POLICE.

15. Mr. C. Brown, C.I.E., who held the office of Inspector-General of Police and conducted the Police administration of the Province during the year with much efficiency, has now retired. The reports for the year on the Police administration and on the administration of criminal justice, apart from the fluctuations in crime, which to a large extent depend on fortuitous circumstances—the agricultural conditions, the prevalence of plague and its attendant disorganization of village life and the like—is satisfactory owing to the evidence, which it affords, of harmonious working between the different branches of the administration which are engaged in the prevention, detection and punishment of crime. The report also contains indications of progress in the Police force in regard to honesty, discipline, enlistment of public confidence, and vigilance in the prevention of crime. Rewards among the Police have been more freely distributed than in previous years; while departmental punishments have been rigorously resorted to when necessary to maintain the discipline of the force. An increase of 20 punitive posts marks the activity of the Police in measures for the prevention of crime. These measures have had an excellent effect. The decrease in terrorism which the reports of the last three years have disclosed is probably largely due to the prompt use of this effective remedy. A satisfactory decrease in serious crime also occurred during the year, with the regrettable exception of a rise in murders in Ráwalpindi. There is a greater tendency observable among the courts to deal adequately with habitual offenders. The efficiency of the Identification Bureau contributes largely to the certainty of identification of old offenders and to their adequate punishment. There is unfortunately some lack of co-operation observable in many districts on the part of Zaildárs, Lambardárs and members of the village community. This subject is under the consideration of Government. The relations between the British Police and those of Native States were cordial.

Police Administration.

CRIMINAL JUSTICE.

16. In the Administration Report of last year reference was made to the fact that Magistrates are often much too lenient to habitual offenders. As above noted, the co-operation of the different Departments, *i. e.*, of the Police and Judicial Departments, in the interests of the suppression of serious crime has become more effective and has already been referred to as one of the satisfactory features of the year's report. The tendency to undue leniency has been corrected. The Criminal Administration Report of the year is much taken up with the burden of work which falls on Magistrates, much of which is due to vexatious, false and frivolous complaints, the abuse of the rights of appeal, and the unnecessary resort to applications for revision. This state of affairs is a serious evil; and as it is due to the inveterate and chronic litigiousness of the people, it is not easy to deal with in all its aspects. Much of

Criminal case work excessive.

this unnecessary litigation can, however, be stifled at its commencement by the exercise of the power of dismissal *in limine* under Section 203 of the Criminal Procedure Code.

PRISONS.

Punishment of crime.

17. The present accommodation in the jails in the Punjab is not sufficient to meet requirements when the jail population happens to be above the average. Overcrowding has occurred lately on several occasions. The project of a new Central Jail in the southern part of the Province will be taken in hand as soon as the question of a site has been definitely settled, and will, it is hoped, do much to remove the evil of overcrowding which at present exists. The health of the jail population has been wonderfully good. The few cases of plague which have occurred in the jails have been promptly dealt with, and the disease has not spread. The discipline and efficiency of the jail establishment was very satisfactory during the year. The jail report has a very distinct interest to those who are engaged in supervising the administration of criminal justice, and enables them to correct certain tendencies observable on the part of the courts. We learn from it that the classification of criminals by the courts as habituals or casuals is not made with sufficient care; that sufficient use has not been made of the Reformatory School at Delhi for juvenile offenders, nor of the provisions of the law for dealing with first offenders; and, on the other hand, that deterrent sentences and sentences of transportation for life have been more frequently awarded in the case of the habitual and confirmed criminal. The report contains an interesting discussion on the efficacy of the mark system as an incentive to good conduct, and it gives reasons for concluding, if it be granted that the system of identification by means of finger prints is good, and its application thorough, that the proportion of convicts who return to jail after a first experience of it is comparatively small, and that the majority of the jail population are casual offenders, not disposed habitually to lead a criminal life.

CIVIL JUSTICE.

Civil case work in courts of first instance.

18. The decrease in the number of civil suits noted in the Administration Report last year has been maintained. The Land Alienation Act has proved a powerful factor in reducing litigation of a certain kind. A marked drop has occurred in suits brought by money-lenders against agriculturists and in suits to establish a right of pre-emption. The amount realized by the execution of decrees, 24 per cent., is still disappointing, although it shows a slight improvement on last year. The disposals of civil case work by the courts of first instance have fallen far short of last year's figures, and notwithstanding the drop in institutions the pending file at the end of the year was not appreciably less. The majority of these cases are disposed of by Munsifs, who are solely employed on civil case work.

District Judges and the Chief Court.

19. The arrangement, introduced last year, to relieve certain District Judges of all work but their civil judicial work has proved satisfactory, and has been extended to some other districts. The Chief Court have not derived so much relief as was expected from the extension of the jurisdiction of Single Benches. The necessity for temporarily strengthening the Court to enable it to clear off its arrears is admitted, and it is hoped that it will be possible to provide adequate assistance before long.

REGISTRATION.

Effect of Land Alienation Act.

20. The statistics relating to the registration of documents indicate a revival of business, the signs of which were noticed last year. This increase in compulsory registrations is fairly attributable to the fact that the Land Alienation Act is becoming better understood. It is particularly noticeable in the case of mortgages. As already remarked, the money-lender is beginning to abandon his attitude of aloofness from his old client, the agriculturist, and to take advantage of the forms of mortgage permitted by the Act. Much of the money-lending business, however, appears to be in transactions between the agriculturists themselves, in which the professional money-lender has no share.

LOCAL SELF-GOVERNMENT.

Local Boards and Municipalities.

21. The history of District Boards, financially, has been one of recuperation from the severe strain caused by the famines and plague. Otherwise there is little to note. The practical administration of District Boards is limited by the fact that some of the most important objects to which their funds are devoted are carried into effect partly or altogether departmentally by the officers of Government. The actual work on District Boards is also for the most part carried out by the official members. The general working of the Boards has been satisfactory. The elective system has not in this Province proved suited to obtain the best results in the existing circumstances either of Municipalities or District Boards. The attitude of the electors in the case of District Boards has for the most part been one of apathy, and as regards membership a nomination is much preferred to election. In regard to Municipalities the case is somewhat different. The interest of public work on Sub-Committees or otherwise in the neighbourhood of their own homes, and the influence which a seat on the Town Council gives is sufficient to attract members of a certain class. But gentlemen who would be useful members are often unwilling to stand for election if there is likely to be a contest, and the mental attitude of leaving things as they are and following the course of least resistance by re-electing the old member is characteristic of the East, and appears to have a share in the election results recorded during the year.

AGRICULTURE, WEATHER AND CROPS.

Harvests of the year.

22. The weather conditions in the early months of 1903 were favourable for the preparation of the land for the staple autumn crops, and an excellent monsoon, well sustained and distributed, resulted in a well-matured autumn crop. The spring crop of the present year 1904 was exceptionally favourable, and resulted in a record wheat harvest both as regards area and yield. The epidemic of plague reached its greatest virulence this year at the time of the harvesting of the spring crops, and was disastrous in its results in the Shahpur District and in the new Jhelum Colony. In the Province as a whole scarcity of labour due to the plague was undoubtedly felt, but did not lead to any appreciable loss in grain, although reaping and harvesting operations were greatly prolonged. The total outturn of wheat is estimated at over three million tons. This crop, which is the most important crop of the Province, was estimated at 118·6 of the normal.

Agricultural stock.

23. The quinquennial census of cattle was taken in February 1904. As the result of the period of famine years, which have intervened since the past census, the increase in cattle has not been so great as it would have been, but there has been a small satisfactory advance throughout the Province, and a very large increase of cattle in the areas to which canal irrigation has been extended. Very valuable work has been done during the year by the Civil Veterinary Department both in the treatment of epidemic disease and in the scientific investigation of disease among cattle. During the year the separation of the Army Remount Department from the Civil Veterinary Department has been completed, and the latter department has been reorganized and strengthened as an agency for dealing with the improvement of the breed of cattle and the prevention and cure of disease.

Agricultural improvement.

24. In the experimental farm at Lyallpur special attention has been given to the improvement of wheat and cotton.

FORESTS.

Forest management.

25. Some forest areas in the Shahpur, Lahore and Multán Districts have been made over to the Civil Department for cultivation in consequence of canal extensions and the requirements of the new colonies. Twelve square miles of the Shahpur Kandi Unclassed Forests have been made a Protected Forest after the preparation of the record of rights. It is proposed to reserve 15 square miles in Montgomery, now included in the Unclassed Forests, as a reserve required for the Sillahdár Camel Corps. The number of forest offences committed during the year was rather above the average. The majority of the cases are compounded under the Act. A large increase in the number of forest fires occurred in the Ráwalpindi Division The amount of timber removed from the forests during the year amounted to 4,490,000 cubic feet as compared with a little over 3,000,000 cubic feet in 1902-03. This increase occurred chiefly in the Chamba and Kángra Divisions. On the other hand, there was a large decrease compared with the previous year in the amount of fuel removed from the forests This decrease is attributable to difficulties in the labour supply at Chánga Mánga and to the stoppage in the sales of fuel in lands about to be colonised. This scarcity of labour, which was due to plague near the plantation and to the demand for labour on canal works elsewhere, prevented the fellings prescribed by the working plan of this plantation from being completed. With this exception deviations from the working plans of the different forests were few and unimportant. The year was a successful one from the revenue point of view. The net surplus revenue amounted to nearly 7 lakhs. There was a good demand for timber, and higher prices were realized than in the previous year.

TRADE.

Total Imports and Exports.

26. The total value of the trade of the Province during the year was £19,840,000 sterling ; the imports exceeded the exports by £285,000. The trade of the Province, though subject to seasonal fluctuations, is expanding. The exports have increased in consequence of the fairly good harvests of the year 1903, but the above figures carry the record of trade statistics only up to the 31st March 1904, and do not include the export trade resulting from the bumper harvest last spring. The improvement in communications

with Karáchi has greatly increased the importance of this port to the Punjab, of which it is geographically the natural outlet. An increase in the export of raw cotton is a satisfactory feature of the export trade, and it is to be hoped that the endeavours now being made to improve the quality and out-turn of this staple will be successful and cause this trade to be further developed.

Trans-Frontier Trade.

27. The trans-frontier trade of the Punjab, since the separation of the North-West Frontier Province, is almost entirely confined to interchange of commodities with Kashmir proper and Ladakh; and the Kashmir trade accounts for 94 per cent. of the whole. Ladakh takes chiefly piece-goods and supplies raw wool and charas. Kashmir trades in all commodities; the demand for European piece-goods, leather, metals and petroleum is considerable, and the country supplies raw hides, drugs and charas, grain and fruits.

PUBLIC WORKS.

Increased expenditure on Public Works.

28. It is a matter of congratulation that the Local Government has been able during the last three years to give much larger grants for Public Works. A long series of hard years and impoverished finances had seriously crippled the development of the Province in all works of improvement, and every department was to a certain extent starved. There was therefore much leeway to make good, and the increased expenditure on Provincial Civil Works is the index of the progress made,—7 lakhs in 1900-01, 14 lakhs in 1901-02, 20 lakhs in 1902-03, and 23 lakhs in the present year, apart from expenditure on repairs. The outlay during the current year was spread over all departments,—Civil, Judicial, Jails, Police, Medical and Education. The extension of the colonies and the increase of population over large tracts of country which were once waste lands has necessarily involved a large outlay on public offices, which calls for no remark. The extension and development of the system of roads in the colonies and in areas which have come within the reach of the large perennial canals is now receiving the careful attention of the Public Works Department. The progress made in works connected with the sanitary improvement of towns in the Province has been satisfactory.

IRRIGATION.

Irrigated area.

29. All the perennial canals with the exception of the Sirhind, which was stationary, exhibit an increase in the irrigated area compared with the average of the previous three years. The inundation canals also experienced a very favourable season owing to the late and well-sustained monsoon, and gave good results. The total area irrigated by all the Punjab Canals, Imperial, Provincial and Native States, amounted to 6,390,334 acres. About one-fourth of the crops in the Punjab are matured with the assistance of canal irrigation. The Chenab Canal now irrigates two million acres, which is more than the area irrigated by the Bári Doáb and the Sirhind taken together. The head-works of the Jhelum Canal were completed during the year, and the main lines of the canal were also completed, while considerable progress was made towards the completion of the Major and Minor Distributary System.

Income from canals.

30. The capital outlay on the canals classed as Major Productive Works amounts to £7,127,196 sterling, on which interest at 12 per cent. was earned as the net result of the year's working after deducting expenditure from income. The most paying canal is the Chenab, which gave a revenue of 23½ per cent. The inundation canals show good results owing to the favourable and late monsoon. All the canals earned over 7 per cent., except the Jhelum, which is not yet in full working order.

REVENUE AND FINANCE.

Total Revenue and Expenditure of the Punjab.

31. The receipts increased from all sources except Salt, Income Tax, Tribute and Jails. The decrease under Salt amounts to 10 lakhs and under Income Tax to nearly 3 lakhs. The sales of Punjab rock salt considerably exceeded those of the previous year, and the falling off in the salt revenue is the result not of diminished consumption, but of the reduction in the duty which took place with effect from the 18th March 1903. The decrease in the Income Tax is the result of the policy of raising the minimum taxable income from Rs. 500 to Rs. 1,000. Important increases of revenue occurred under the following heads of income:—Land Revenue, 20 lakhs; Irrigation, 16 lakhs; Local Rates, 4 lakhs. The favourable character of the harvests and the extension of canal irrigation and revision of Settlements account for the satisfactory state of the Provincial finances as indicated by these figures. The total income amounted to 666 lakhs of rupees, compared with 632 lakhs of rupees last year. The expenditure was increased by 15 lakhs and amounted to 365 lakhs excluding expenditure on the Military, Railways, Post Office, Telegraph, and Municipal, and Capital expenditure on canals. The cost of the General Administration was less than in the previous year owing to the fact that the Delhi Darbár charges no longer figure in the accounts. Settlement operations account for an increase in the Land Revenue charges. The special measures for the suppression of plague adopted in 1902-03 having been discontinued, the expenditure under the heading of Medical Charges was reduced. A satisfactory feature in the year's accounts is that it has been possible to provide for the growing requirements of the education of the country and to make a very considerable increase to the expenditure on public works. The assistance which the Government of India has rendered to the Provincial finances by making special assignments to meet the deficits caused by extensive remissions of land revenue, due to the late famines, and to provide funds for special objects, must be here acknowledged. This assistance, combined with the satisfactory increase of revenue recorded in this report, has resulted in a balance at the credit of the Provincial Government at the close of the year of 32 lakhs of rupees.

Local Funds and Municipal Revenues.

32. As in the case of the Land Revenue, Local Rate collections both of the current year and of former years have been much facilitated by the favourable agricultural conditions, and the income of District Boards has consequently benefited. Extraordinary expenditure on plague measures has also ceased to be a drain on Local finances. The result has been that District Boards have been able to repay to a large extent the loans which had been temporarily advanced by Government to meet deficits caused by suspensions and remissions of revenue, famine charges and plague expenditure; and more than this, after incurring a largely increased expenditure on roads

and communications, the closing balance at the credit of District Boards exceeded the opening balance by nearly a lakh of rupees. Municipal finances have also shared in the improved financial conditions. The closing balance at the credit of Municipalities was Rs. 1,60,000 more than the opening balance. Collections from Rates and Taxes improved by over 1½ lakhs, nearly the whole of which was accounted for by Octroi collections. The total expenditure of Municipalities was increased by Rs. 63,000. Considerable activity has been displayed in the larger towns in projects of drainage, water-supply, hospitals and street-lighting, and it is satisfactory that nearly the whole of the increased expenditure was incurred on objects connected with the public health and convenience.

VITAL STATISTICS.

Births and Deaths.

33. The birth-rate of the Province has fluctuated considerably during the past five years in consequence of the disturbing causes of famines and excessive autumn fevers. The high birth-rate of 46·2 per thousand, which was reached in 1899 after a healthy autumn, was followed by very low birth-rates in the two following years, in consequence of the famine and severe malaria. Since then the rate has been fairly constant at 42 or 43 per thousand. This year it was 42·9 per thousand. The effect of the plague in reducing the birth-rate is only appreciable in small areas where the virulence of the disease has been excessive. The year 1903 stands out for its extreme unhealthiness. The Punjab was the unhealthiest Province in India. The mortality rate of 49 per thousand was 21 per thousand over that recorded in a healthy year, such as 1899. Almost every disease shows an increased mortality rate: fevers, small-pox, respiratory diseases, and especially plague, were all more fatal than in the previous year.

Plague.

34. The highest mortality from plague during the year 1903 occurred in the districts of Gujránwála, Amritsar, Jullundur and Lahore. The epidemic reached its height in the months of April and May, a month later than in the previous year. The number of attacks and deaths from plague in the British districts exceeds that of any previous epidemic. Seven new districts became infected during the year, making 21 districts in all where its blighting influence is felt. The results of inoculation vary in different areas; but the inoculated were everywhere much better off than the uninoculated as regards their liability both to attacks of plague and to deaths when attacked.

Fevers.

35. The deaths caused by fevers numbered 509,307. There was a great increase in the fever rate over the average in several districts in consequence of the abnormal monsoon rains and inundations.

MEDICAL RELIEF.

Hospitals and Dispensaries.

36. The attendance of both in-patients and out-patients at the dispensaries of the Province for 1903 exhibits a substantial increase over that for last year, and surgical operations have also risen in number. There is no doubt that the dispensaries are increasing their hold on the public, and that they are doing a great amount of quiet and efficient work. The Pasteur Institute at Kasauli maintains its efficiency and is freely resorted to by Natives as well as Europeans, and the benefits of the Lunatic Asylum, Lahore, are becoming better known.

Vaccination.

37. The total number of vaccinations during the year has increased somewhat in spite of the prevalence of plague, and no special remarks are required.

SANITATION.

Sanitation in Towns.

38. Numerous projects for improving the water-supply and sanitation of different towns were sanctioned during the year. Good progress was made in the important works which have been undertaken for the improvement of the sanitation of Simla and in the Water-Works of the Amritsar City.

EDUCATION.

General Progress.

39. The total expenditure on education in British Punjab was Rs. 39,18,070. This total shows an increase over the expenditure last year of Rs. 3,36,607, of which sum Rs. 2,87,193 was provided by the Local Government. The greater part of the increased expenditure was incurred on charges connected with the improvement of Primary Schools. With this object 20 Assistant District Inspectors of Schools were appointed during the year with a view to closer attention to and encouragement of Primary Education. A sum of Rs. 40,000 was paid by the Provincial Government during the year in addition to the sum of Rs. 60,000 paid last year towards the improvement of Primary School buildings under Local Bodies. A further increase of expenditure of about Rs. 5,000 has also been devoted to increasing the staff of teachers at the training institutions, in order to provide for a two years' course of training for the teachers engaged in general educational work. The year has therefore been one in which a decided impetus has been given in certain directions, and particularly in the establishment of Primary Schools in rural areas suited to the needs of the masses. The necessity for making strenuous efforts in this direction can be estimated from the fact that the proportion of children of a school-going age, receiving instruction in the various educational institutions in the Punjab and Native States, is still only 12 08 per cent. for boys and 1·72 per cent. for girls. As another step towards freeing the educational system of the Province from the undue bias which it had acquired towards an education suited solely for a clerical career, the Anglo-Vernacular Middle School Examination, to which excessive importance had been attached and which was becoming almost unmanageable from the number of pupils entering for it, has been abolished, and will be replaced by local scholarship examinations at the head-quarters of each district at the time of its annual inspection. Primary Schools have increased during the year both in number and in the attendance of pupils. At present the proportion of boys who complete their education at the primary stage is 31·2 per cent. If the efforts to make the primary course suitable and sufficient in itself for the requirements of the agricultural classes prove successful, this proportion will probably increase in future. As regards the artisan classes, the progress in combining a general with a technical education at the Railway Technical School, which is becoming more popular every year, is very encouraging, and similar schools exist also at Amritsar, Delhi and Ludhiána. A more purely technical education is obtainable at the Mayo School of Art; while the long list of aided and indigenous schools (detailed in the Education Report of the year), where industrial

classes are held, shows that a growing need is felt and is being gradually met, for technical training. A small decrease occurred in the number of Secondary Schools, but both in Secondary and Primary boys' schools the character and method of teaching has improved considerably. This fortunate result is due to the good influence and superiority of work of the teachers trained at the training institutions, and it is satisfactory to note that during the year over 300 trained teachers left the training institutions to go and work in the different schools of the Province. There was an increase in the number of girls attending Primary and Secondary girls' schools. The standard of education required by the University is maintained at a high level, and the stimulus of competition between the different colleges is a healthy feature of the college life of the Province. Many questions of interest were discussed at the Educational Conference which will ead to further progress. The Educational Exhibition held at the beginning of the year was a new departure and proved useful and stimulating.

LITERATURE AND THE PRESS.

Literature and Press.

40. Although the number of publications from the Vernacular Press has increased, nothing of permanent literary value has come to notice. The essentially poetical genius of the Punjab peasantry finds expression in numerous popular ballads, songs, proverbs or lampoons, and has no need to look to Persian, Arabic or English for its inspiration. With this natural temperament it is to be hoped that the growth of a genuinely indigenous literature will only be a matter of time.

Punjab Government Press, Lahore—8-12-04—484.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1. Physical Features of the Country, Area and Climate.

(See pages 1—12 of the report for the year 1901-02.)

2. Historical Summary.

(See pages 12—32 of the report for the year 1901-02.)

3. Form of Administration.

(See pages 32—35 of the report for the year 1901-02.)

4. Character of Land Tenures and System of Survey and Settlements.

(See pages 35—43 of the report for the year 1901-02 and the Punjab Settlement Manual.)

5. Civil Divisions of British Territory.

(See page 44 of the report for the year 1901-02.)

6. Details of the last Census—Tribes and Language.

(See pages 45—53 of the report for the year 1901-02.)

7. Changes in the Administration.

The Attock District.

1. The constitution of the Attock District, the consequent re-arrangement of the Ráwalpindi and Jhelum Districts, and of the Ráwalpindi Division took effect from the 1st April 1904, and will be noticed in detail in next year's report.

Area, population and revenue of the Punjab.

2. The area, population and land-revenue collection of the Punjab as now constituted are as follows :—

Area, square miles.	*Population.*	*Land-revenue collection.*
		Rs.
96,704	20,306,252	2,51,41,872

8. Relations with Tributary States and Frontier Affairs.

Political supervision.

3. It was explained in the report for 1901-02 that excluding Baháwalpur, for which there was then no special Political Officer, and Chamba, which was in the political charge of the Commissioner of Lahore, the Native States in

the Punjab were arranged for the purposes of supervision into four groups as follows:—I, the Phulkián States, comprising the States of Patiála, Jínd and Nábha, for which a separate Political Agent was appointed on the 16th January 1901; II, the States of Kapurthala, Mandi, Máler Kotla, Farídkot and Suket in the political charge of the Commissioner of Jullundur; III, the States of Sirmúr, Kalsia, Pataudi, Loháru and Dujána in the political charge of the Commissioner of Delhi; and IV, the States of Biláspur, Bashahr, Nálagarh, Keonthal and numerous other small States in the Simla Hills, which are in the charge of the Superintendent of Hill States, Simla. This classification, which held good throughout 1902-03, though it ignores the distinction between States which are tributary and those which are not, is a convenient one, and has been maintained. The only change in the classification during the year under report was the inclusion of Baháwalpur with the Phulkián States in the charge of the Political Agent, to which reference will be made in greater detail in the paragraph dealing with Baháwalpur. For the rest the administration of Jínd has been occupying more and more the attention of His Highness the Rája, whilst in Nábha the beneficent rule of Sir Híra Singh has continued to be a blessing to his subjects. In the remaining States, generally speaking, the administration has proceeded smoothly. Full information will be found in the report for 1901-02 as to the area, population, gross revenue and estimated Military forces, including Police, of each State, and the following brief notices give information concerning any special events of importance in the history of particular States during the year.

PATIALA.

Area 5,412 square miles; population, 1,586,030; gross revenue, Rs. 71,46,900; Army and Police, 6,391; race of Chief, Sidhu Ját; age of Chief, 12.

General progress.

4. The progress reported last year in the condition of the Patiála State has been more than maintained, and its finances have at last been restored to a sound footing. There is a reserve of nearly 20 lakhs in the Treasury, the debts of the late Mahárája have been settled, and all outstanding claims adjusted. During the year the suit brought by the State against the firm of William Watson and Co. was compromised on terms most satisfactory to the Darbár, and from the estate of the bankrupt Mr. S. J. Tellery a sum of over Rs. 50,000 was also received. The only matter still under discussion is the transactions between the late Chiefs of Patiála and Dholpur. Side by side with these special cases there has been a steady improvement in the general administration. Reductions have been made in overgrown establishments, in the local troops and in the Police Force, at an expense of over 2 lakhs in compensation and gratuities. A system of account and audit has been thoroughly established in the Civil, Military, Police and Postal Branches of the administration, and some progress has also been made with the audit of the Public Works Department. Much of course remains to be done, but the progress of reform has been sufficiently rapid for the resources of the State, and for the officials at the head of the various Departments. In no branch has better work been done than in the Settlement department. New assessments have been announced in two tahsíls out of 9, and in 4 of the others measurements have been completed.

Personal.

5. An English guardian and tutor has been appointed to His Highness the Mahárája, and it has been arranged that the latter shall go to the Aitchison College in October 1904. Kanwar the Hon'ble Sir Ranbír Singh, K.C.S.I., has been nominated a Member of the Punjab Lagislative Council, and the title of Sardár Bahádur has been conferred on Sardár Prítam Singh, the Commander-in-Chief of the State Forces. The Foreign Minister, Colonel Abdul Majíd Khán, has also received the Silver Kaisar-i-Hind Medal. The State was honoured during the course of the year with a visit from His Excellency the Viceroy and Governor-General.

BAHAWALPUR.

Area, 20,000 square miles; population, 720,877; gross revenue, Rs. 24,00,000; Army and Police, 1,432; race of Chief, Dáúdputra; age of Chief, 21.

Investiture of Nawab with powers of Ruling Chief.

6. On 30th April 1903 the Baháwalpur State was included with the three Phulkián States in the charge of a single Political Agent, under whose guidance the administration was carried on by the Nawáb until November 1903, when His Highness was invested by His Excellency the Viceroy with the full powers of a Ruling Chief. The Nawáb attended the Conference regarding Chiefs' Colleges at Ajmír during the year as the representative of the Punjab. The State is in a sound financial condition, has a reserve of nearly 30 lakhs, and a settlement of its land revenue is drawing to a close.

MANDI.

Area, 1,200 square miles; population, 174,045; gross revenue, Rs. 4,30,000; Army and Police, 691; race of Chief, Rájpút; age of Chief, 21; tribute, Rs. 1,00,000.

Installation of Raja Bhawani Sen.

7. Rája Bhawáni Sen was formally installed as Chief of Mandi by His Honour the Lieutenant-Governor in October 1903. The Rája has completed his studies at the Aitchison College and is being instructed in the duties of Government under the guidance of an officer deputed as Superintendent from the Punjab Commission for the purpose. The finances of the State are not in a very satisfactory condition and are receiving attention.

KALSIA.

Area, 168 square miles; population, 67,168; gross revenue, Rs. 1,95,809; Army and Police, 172; race of Chief, Ját; age of Chief, 21.

Council of Kalsia.

8. The Sardár came of age during the year and is carrying on the administration with the aid of two councillors under the direct control of the Commissioner. This arrangement, which is now, after some temporary friction, working well, had to be made in the interests of good administration.

BILASPUR.

Area, 448 square miles; population, 41,592; gross revenue, Rs. 1,57,000; Army and Police, 1,021; race of Chief, Rájpút; age of Chief, 31; tribute, Rs. 8,000.

Administrative.

9. In consequence of the Rája's contumacious behaviour it was found necessary to deprive him, for the time being at any rate, of his powers as a Ruling Chief, and to require him to reside out of his State, a suitable allowance being provided for his maintenance. The Rája has accordingly remained at Benares, but has expressed no regret at his conduct, and has made no proposal to comply with the conditions formerly imposed on and accepted by him. In the meantime the State has been placed under management, and the administration has been properly conducted.

CHAMBA.

Area, 3,216 square miles; population, 1,28,005; gross revenue, Rs. 4,57,543; Army and Police, 419; race of Chief, Rájpút; age of Chief, 35; tribute, Rs. 5,000.

Abdication of Raja Sham Singh.

10. The former Chief, Rája Shám Singh, abdicated voluntarily during the year in favour of his brother, Mián Bhúri Singh, C.I.E.

FRONTIER AFFAIRS.

Death of Mazari Chief.

11. There has been absolute peace on the border during the year, and the only item of interest, and that a melancholy one, has been the death of the Hon'ble Nawáb Sir Imám Bakhsh Khán, K.C.I.E., the venerable Chief of the Mazári tribe. His loss has come as a severe blow not only to his own

Tuman, but to the Biloch people as a body, and indeed to the whole Province. His son, Sardár Bahrám Khán, has been installed as Tumandár in his father's place.

9. Condition of the People.

Average prosperity.

12. The year has been on the whole one of average prosperity, except for the prevalence of plague, which is sweeping over the Province with alarming virulence. The subject has been treated in detail in Chapter VI.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications:—

Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1902 to 30th September 1903.

General Report on the Operations of the Survey of India for the year ending 30th September 1903.

Annual Report on the Settlement Operations in the Punjab for the year ending 30th September 1903.

Report of the Operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1903.

Annual Report of the working of the Punjab Alienation of Land Act XIII of 1900 for the year ending 30th September 1903.

Annual Reports for the Chenab, Jhelum and Chunián Colonies for the year ending 30th September 1903.

Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1903.]

10. Realization of the Land Revenue.

Fixed Land Revenue.

13. The land revenue demand is distributed under the 3 heads, fixed, fluctuating and miscellaneous. The total demand of fixed land revenue was for the year under report slightly over 206½ lakhs, and in spite of the not altogether favourable agricultural conditions nearly 194 lakhs, or 93 8 per cent., was recovered. Of the remainder about 11½ lakhs had to be placed under suspension owing to defective rainfall, especially in the ill-fated Rohtak and Hissar Districts of the Delhi Division, and only about a lakh was left unaccounted for. Of this, rather over half represents only nominal arrears, whilst the remainder denotes real deficiencies due to delays in collection. That the fixed land revenue, which stood last year at between 206 and 206½ lakhs, has shown no increase in spite of the resettlement of the district of Muzaffargarh and of the Fázilka Tahsíl of the Ferozepore District and part of the Jhang District, is due to the fact that in Muzaffargarh as in Jhang the tendency has been, as elsewhere in recent years, to substitute a fluctuating for a fixed form of assessment. The balances of fixed land revenue for preceding years now amount to some 16½ lakhs as against nearly 38 lakhs last year. This great clearance has been due mainly to the writing off of famine arrears under the orders of the Government of India.

Suspensions and Remissions of Fixed Land Revenue.

14. It has already been remarked that some 11½ lakhs of rupees have this year had to be put under suspension, and that large sums have been written off as famine arrears. This has not been done lightly, and the discussion, which has accompanied it, and which found voice in the recommendations of the Famine Commission of 1901, has ended not only in the practical relief afforded, but also in considerable modifications in the policy of Government with regard to suspensions and remissions of fixed land revenue. To begin with a small matter, experience in the famine districts has shown that considerable hardship was caused to the zaildárs, on whom so much of famine work falls, by the fact that they drew their emoluments from the revenues of their villages, and were thus temporarily deprived of them when suspensions of the revenue were given. This has been met by authorising the Deputy Commissioner to allow the emoluments to be drawn as a special case from any village in the district whose revenue may be collected. Again, Sec-

tion 30 of the Tenancy Act provides that, if a landlord, before the expiry of the period of suspension, collects any rent, the payment of which has been suspended by the same order as suspended the land revenue, the whole of the revenue suspended in his favour shall become immediately payable by him. The object of this section was to pass on to the tenant cultivator the same indulgence in the payment of his rent as had been shown by Government to his landlord in the matter of his revenue. Experience, however, has shown that the landlord can afford to laugh at this restriction. If he can manage to exact all or the bulk of the rent due to him from all his tenants he can at once meet the revenue demand, whereas if he exacts only from a few and the penalty is enforced against him generally, he becomes entitled to proceed against the rest, and their protection is removed from them. A draft Bill has now been circulated for opinion, with a view to replacing the penalty above referred to by a fine. It is also proposed to take power to suspend or remit rents, even when the land revenue of the same land has not been suspended or remitted, in order to meet the case of wealthy and exacting landlords with poor tenants. Finally, some changes have been made in general policy. These consist in (1) discriminating between times of famine and widespread scarcity on the one hand, and calamities of season within a defined locality, which admit of more detailed treatment, on the other; (2) circumscribing the occasions on which discrimination between rich and poor revenue-payers should be practised; (3) prescribing a danger rate with a view to compelling attention to villages which may need relief; and (4) giving more detailed instructions for the recovery of suspended revenue, including provision for the application of a limit to the amount to be under suspension at any one time in any districts or tracts to which Government may think it necessary to apply this rule. It will not of course be supposed that all the above improvements have been suddenly introduced. They have existed in a greater or less degree in many districts for some years past. The present year has seen them codified and authoritatively issued in Revised Revenue Circular No. 31. The occasion has also been taken for revising the statements for reporting suspensions, remissions and collections of suspended revenue with a view to greater efficiency by facilitating check.

Fluctuating Land Revenue.

15. One of the most prominent features of the Land Revenue Administration of the province during the last few years has been the marked trend in favour of a fluctuating as opposed to a fixed form of assessment for irrigated or sailáb lands, and during the year under report the amount of fluctuating land revenue permanently excluded from the rent roll has risen from about 26½ to 28 lakhs. This is partly due to extensions on the Ferozepore Inundation Canals, and to the spread of canal irrigation in the colonies, but the total is also swollen by the conversion to a large extent of the Muzaffargarh District assessment from the fixed to the fluctuating system. The increase would have been larger had not short supplies in the rivers injuriously affected the receipts from the Multán and Montgomery Inundation Canals. The collections on other canals showed no great difference. It is too soon as yet to attempt to foretell the future of fluctuating assessments. Difficulty is reported to be experienced in working them in Dera Gházi Khan, Muzaffargarh and the Hithár Circle of the Fázilka Tahsíl, whilst in the Rávi Bet Circles of Montgomery, as in Multán, they are said to be growing in popularity. Ideally of course a system, by which only matured crops are charged with revenue, must be the best. The difficulty experienced has been, with the staff available, and the standard of integrity prevailing, to allow for the several gradations of maturity in crops which depend on the uncertain irrigation of an inundation canal, or are raised in the necessarily unstable conditions of a colony.

Miscellaneous Land Revenue.

16. There has been an increase under this head of revenue from some 7½ to some 15½ lakhs. This is due almost entirely to the opening up of the colonies. Over 4½ lakhs were obtained from auction sales of land on the Jhelum Canal, whilst a little over a lakh represents the profits got by issuing farming leases to temporary cultivators pending the arrival of the regular colonists. Over 3 lakhs again were levied from purchasers of shop sites in the various new towns.

Collection of the Land Revenue.

17. That the revenue is readily paid is evidenced by the fact that in only three cases was it necessary to assume direct management or to order a farm or transfer. Moreover, the writs and warrants issued did not exceed the number last year. At the same time a tendency to issue warrants of arrest immediately, without first having resource to writs of demand undoubtedly exists, and it has been ruled for the guidance of Collectors that writs are always to issue in the first instance; and warrants only if the writs fail; and that where the number of warrants exceeds half the number of writs, the matter is to be explained in the annual land revenue report. It is interesting in this connection to note that the practice of paying in land revenue through the Post Office by revenue money order is steadily expanding. Attempts were made during the year to obtain a reduction of the fees chargeable on this class of business, but enquiry showed that with village post offices, organised as they are only for ordinary monetary transactions, it would be dangerous to invite any great increase in revenue money order transactions.

11. Surveys.

Survey of India Party No. 18 (Punjab).

18. The year has been an active one, and considering the smallness of the party employed (No. 18 (Punjab) Survey of India), the outturn has been very satisfactory. At the same time there is much left to be done, and representations have been made with a view to augmenting the staff, and orders have been received that the subject will be dealt with in connection with the general question of the preparation and revision of topographical maps. It is satisfactory to be able to record that the fragmentary remnants of previous Himálayan work in the Simla Hill States, Tehri-Garhwál and Jaunsár have been completed, as has also the Simla boundary survey. 97 sheets of the latter have been fair drawn and partially typed, and the remaining 12 held over for another year to admit of the railway being shown. Side by side with these 3,653 square miles have been topographically surveyed for the preparation of standard sheets on the 1-inch scale, in parts of Montgomery, Lahore and Amritsar. In Multán too considerable preliminary compilation and traverse work has been done with the same object, and with a view to providing a clear and definite plan of riverain areas, where a fixed boundary has recently been laid down under the Riverain Boundaries Act, 1899, as also in order to afford data by which important disputes may be disposed of, riverain surveys on the 4-inch scale, and preliminary compilation and traverses for the same, have been made on the Chenab, Sutlej and Indus. Whether these riverain surveys are, in the present very backward condition of ordinary survey work, worth the trouble and delay which they undoubtedly cause is a question which is under consideration.

Boundary Demarcation. Cases with Native States or other Provinces, etc.

19. Renewed efforts have been made during the year to dispose of all pending boundary cases. They fall for the most part into two classes,—cases with Native States or other provinces of British India, and riverain boundary cases. With regard to the former it was noted in 1901-02 that a fixed boundary of jurisdiction had been laid down the river bed between the Native State of Bahawalpur and the Punjab District of Dera Ghazi Khan. During the present year this work has been carried on into the Shujabad and Lodhrán Tahsíls of the Multán District, and it is hoped that before long the rest of the line through the remaining portions of the Multán District and through the Muzaffargarh and Montgomery Districts will have been disposed of. Similarly fixed boundaries were laid down between the Ferozepore and Amritsar Districts and the Kapurthala State on the Sutlej. The question of laying down a fixed boundary between the Punjab and the United Provinces of Agra and Oudh along the Jumna has also been taken up, as has the boundary demarcation between the Jhelum and Gujrát Districts and the Kashmir State. Steps are also being taken to demarcate Government waste land in the Montgomery District, where this is now becoming irrigable from the Chenab Canal.

Riverain Boundary Cases.

20. Before the passing of the Riverain Boundaries Act, I of 1899 (Punjab), the deep stream rule as legalised by Bengal Regulation No. XI of 1825 and Schedule I of the Punjab Laws Act IV of 1872 prevailed almost entirely throughout the province. With the steady increase in the efficiency of the

administrative machinery the state of affairs, with the numerous quarrels and never ending disputes, became intolerable, and one of the earliest acts of the then newly-created Punjab Legislative Council was to do away with the makeshift arrangement embodied in the Punjab Laws Act of 1872, and to take power to lay a fixed boundary between estates down the courses of all the big rivers. Since the passing of the Act special officers have been deputed each cold weather, when the rivers are low, to carry out the necessary demarcation work, and already a large part of it has been completed. It will be out of place until the last boundary has been laid or until the next decennial report is prepared to attempt to review the operations. For the present it will be enough to note that the work is going on apace, and that during the year fixed boundaries were sanctioned for estates on the Sutlej in the Kasúr Tahsíl of Lahore on the right bank and the Zíra and Ferozepore Tahsíls of Ferozepore on the left bank, and in the Dipálpur Tahsíl of Montgomery on the right bank and the Ferozepore District on the left bank. Work has also been in progress between two Amritsar and two Siálkot villages on the Ravi, and between Hoshiárpur and Ambála and Ludhiána on the Sutlej. A fixed boundary is also being laid down on the Sohan in Hoshiárpur.

12. Settlements.

Progress of operations in the Punjab.

21. Settlement operations have been completed in Muzaffargarh and in the Sirsa Tahsíl of the Hissar District and in the Punjab Tahsíls of the old Dera Ismail Khan District; they have been in full swing in the Attock Tahsíl of the old Ráwalpindi (the present Attock) District, in Jhang, and in the Háfizabad and Khángah Dográn Tahsíls of the Gujránwála District; they have been well started in the rest of the old Ráwalpindi District. As already noted, the effect of the Muzaffargarh Settlement was to introduce over a large area a system of fluctuating assessment. Otherwise there has been very little of interest to chronicle. In the Attock Tahsíl the system, by which the maps of last settlement are merely brought up to date, and remeasurement is not made, proved so successful that the same plan has been followed throughout the Ráwalpindi District. This will become more and more possible as districts, which have already undergone a second regular settlement on modern lines, come under resettlement. The saving of time and trouble to the people, which the system involves, has proved quite remarkable. All the settlements completed have proved profitable to Government.

Supervision still exercised in North-West Frontier Province.

22. The Settlement Commissioner has continued to supervise the settlement operations in the Hazára and Kohát Districts and in the frontier tahsíls of the Dera Ismail Khan District of the North-West Frontier Province.

13. Land Records.

Patwari and Kanungo Agency and Land Record Establishments.

23. A full account of the Patwári and Kánúngo Agency was given at pages 71—75 of the report for the year 1901-02. During the present year the long contemplated step of provincialising the Patwár Fund has at length been taken, and it has been decided to pay the entire cost of the Field Kánúngo Agency from the amalgamated Fund. It will now be possible to equalise the pay of Patwárís throughout the province, by making up from the richer districts the deficiencies in those which are less well off. Steps have also been taken to ensure that the posts of Siáh Navís and Tahsíl Wásil Báqi Navís, which are reserved for Patwárís, shall actually go to them, enquiry in one Division having shown that, owing to office intrigues, out of 43 posts only 15 had been properly allotted. It has also been proposed to throw open the post of Tahsíl Judicial Muharrir to this class. It is also being arranged to check the practice of enrolling Patwári candidates indiscriminately by fixing scales of recruitment, which shall ensure that every candidate shall at least have a chance of employment. At present the number of candidates in the province is in the proportion of 43 per cent. to the number of posts, which is largely in excess. Altogether the efforts which have been made for several years to increase the efficiency of this very important branch of the subordinate establishment have proved successful It is noted by the Director of Land Records that 80 of the existing Patwári candidates have passed the Entrance Examination. The absence of a pension fund, however,

still operates to prevent the weeding out of useless men, and gratuities, though liberally given, do not make up for this long-felt want. The efficiency of the Kánúngos has also been kept in view. Large numbers have been sent for training to various settlements, 26 have been accepted as Náib Tahsíldár candidates or have been appointed as such, whilst 6 others have been otherwise promoted.

Statistical information derived from the Land Records.

24. The total number of mutations of title continues to rise, no less than 599,167 having been attested as against 559,044 for last year. This is ascribed to the heavy death roll on account of plague. Special measures were taken to keep this branch of the work up to date with satisfactory results. Steps have also been taken to simplify some of the forms and to do away with others. The disadvantages of elaboration were experienced when the time came to commence a general enquiry into the alleged failures of sailáb in riverain tracts in consequence of the opening of perennial canals. It was then found that the records of past years had not been correctly prepared, and that the information regarding these areas was inaccurate. This has now received attention. Certain alterations in the records were also necessitated by the Alienation of Land Act.

14—Waste Lands and Government Estates.

Government Canal Colonies.

25. The colonies of the Province, though still in their infancy, form one of the most interesting features of the administration, and absorb more and more the attention of Government in the various branches interested in their development. The two oldest colonies, the Sidhnai and Lower Sohág Pára in the Multán and Montgomery Districts, respectively, with an area of some 500,000 acres, have for some years passed into a settled condition, and are administered as part of the general system. No special questions have arisen in their connection during the year, which is the best tribute to their condition. The Chenab, Jhelum and Chunián colonies on the other hand are still separately reported on as presenting special features, and the two first named are specially administered under the supervision of the Settlement Commissioner by specially selected officers, and all three are subject to the provisions of the Government Tenants Act (Punjab), III of 1893. This Act, which was necessarily framed without experience of the manner in which large colonies would be developed, and which aimed at avoiding the necessity for separate leases for each lessee of Government waste land, has been found to possess many important defects in practice, in particular in matters relating to succession, tree-planting, sanitation and mule-breeding in the colony, and a revised draft Bill has been prepared and is now under discussion.

Chenab Colony.

26. The progress of settlement operations in the colony during the year has been satisfactory, and the soil classification, which is being made with a view to facilitating assessment, will be continued, though it is as yet too early to decide on what basis re-assessment will be possible. The most popular crop with the grantees is wheat which accounts for almost 50 per cent. of the harvested produce, cotton coming next at about 11 per cent. Almost $\frac{2}{3}$rds of the total cultivated area is in the hands of the grantees themselves, but of the capitalist and yeoman grantees very few reside and only 283 out of 50,610 acres held by these classes are self-cultivated. This shows what a mistake it was not to have enforced residence from the first. The lesson has been somewhat dearly purchased, but it has borne fruit in the Jhelum Colony, where only in special cases are grantees allowed to be absentee landlords. Amongst the cultivators, who are to the largest extent self-cultivating, are to be found the nomad tribes of the old waste, who have settled down to agriculture in the most surprising manner. The story is told that when the colony was first opened and the railway was made, some of these nomads were shown an engine at work and expressed themselves surprised at being unable to discover where the camel, their only idea of motor power, was hid. Now it is said they have settled down to the use of bullock carts. In the same way there is a decided tendency to assimilate new ideas in matters of social custom as well as of agriculture. The Gurdáspur settlers have at length begun to overcome their deep-seated fear of buildings of burnt brick, and the Aráín women of Jullundur have supplemented their scanty petticoats with voluminous trousers, without which it has been found impossible on high days and holidays to support their new social dignity. The sweeper class too has risen greatly in

the colony, and in 1901 numbered over 97,000 souls, a total which exceeds that for any other district in the Province, except Lahore. Most of them have given up their traditional employment and have become prosperous agriculturists, a change which would have been quite impossible in any old world community. Altogether the condition of the colony is one of great prosperity, which is likely to increase as new schemes of irrigation are worked out, and the colony is further opened up with the branch lines of railway now under discussion, and the feeder roads at present under contemplation. In all 1,773,398 acres have been brought under colonisation, and the population settled amounts to about 1,000,000.

Jhelum Colony.

27. The conditions and arrangements for colonisation in the Jhelum Colony have now reached what is practically a final form, and very considerable progress has been made in the work of allotment. The total area available for colonisation proves to be about 488,000 acres. After making provision for civil and military reward grants and for grants of a miscellaneous nature, the remaining area amounting to about 270,800 acres has been reserved for grants to colonists on conditions of horse-breeding and for Imperial and regimental horse-runs. Some modifications in the terms of horse-breeding grants were made during the year. The most important of these changes is the grant to each colonist of two squares instead of one and-a-half, so that a higher standard of brood mare can be insisted on. It is a most satisfactory circumstance that there has been no difficulty in securing an ample number of applicants for grants on horse-breeding conditions on the terms offered. It is indeed a remarkable tribute to the belief of the people in the colony policy of Government that they have accepted without demur any conditions offered them, in the confident expectation that their own interests are the immediate care of Government, and that the conditions imposed will always be such as the average man can readily fulfil. That this confidence is shared by the commercial as well as the agricultural classes is proved by the fact that shop sites have been readily bought up at from Rs. 600 to Rs. 800, directly proceedings for the creation of a new town have been started. In all 64,468 acres have been allotted in this colony. The work was only commenced in September 1902.

Chunian Colony.

28. No fresh allotment has been made in the small Chunián Colony in the Lahore District during the year, and there is nothing of particular interest to record. The recoverable demand for the year under report came to a little over 1¼ lakhs. Thirty-three thousand five hundred acres have been allotted in the colony, but it is hoped that 40,000 acres more will shortly be opened up.

Other Government waste.

29. Besides the above mentioned areas, there are still large tracts of waste land in the Province much of which only awaits irrigation to rival the present colonies in fertility, and far-reaching schemes are under discussion. At present the bulk of this area is only fit for grazing, and during the year arrangements have been completed for supplying grazing grounds for the Silláhdar Camel Corps, which have recently been raised at Montgomery, Lahore, Shahpur, Ráwalpindi and Multán. It is also under contemplation to do the same for the corps which it has been decided to transfer from Nowshera to Campbellpur. The plan is to the effect that during the period the camels are on employed pay at the head-quarters of the corps they are to have free grazing. The new rules to give effect to this have not yet perhaps settled into their final shape, as experience has still to be acquired of the requirements to be met, but the movement is a very important one, as it will go far to save the people from the evils of transport collection in time of war and should do much to rehabilitate the position of the camel. Arrangements have also been made during the year for grazing by transport camels on the line of march, which is only another step in the same direction. It may also be noted in this connection that the special camel service grants in the Chenab Colony have been successfully worked throughout the year.

15.—Wards Estates.

Punjab Court of Wards Act, II of 1903.

30. The necessity of special legislation in supersession of the provisions of the Punjab Laws Act, IV of 1872, to which reference has already been made in dealing with the riverain boundaries question, and which is the

direct outcome of the institution of a Provincial Legislative Council, has been nowhere more apparent than in the case of the management of wards estates. Under the old Act, framed at a time of decentralisation, when control was less rigid and the tradition of a very independent district administration was still fresh, the Deputy Commissioner of each district was his own Court of Wards and there was very little in the nature of law to control his actions. This worked well enough as long as no disposition existed amongst the public to question his decisions. The growth of sophistication however has for some time caused difficulties, and the increasing centralisation of the administration has rendered the old position incongruous. Moreover, serious deficiencies in the old law have for long existed. There has for instance been no sufficient authority for dealing with claims on encumbered estates, and it has been impossible to retain them under management on the ward coming of age, which has of itself entirely prevented the raising of loans on business principles. By the new Act, No. II, Punjab, of 1903, which came into force on June 25th, 1903, the Financial Commissioner, instead of occupying as hitherto the position of a controlling authority, has himself been made the Court of Wards for the whole Province. To prevent needless references rules have been issued under the Act, together with an explanatory circular, defining clearly the powers of Commissioners and Deputy Commissioners and laying down certain much needed principles of management. There are now 44 estates under the Court of Wards, which, though very much less than was the case some years ago, when Deputy Commissioners took over charge very lightly, is still excessive, and measures are being taken to release all such as are either too petty to require the intervention of Government or raise no particular political interests. The tendency in this as in other branches of the administration is to restrict Government intervention to the least possible and to depart to this extent from the old paternal ideal of administration. The actual details of the year's operations call for no special remark.

16.—Revenue and Rent-paying Classes.

Alienation of Land Act, XIII of 1900.

31. The Land Alienation Act had been in force for over two years when the last report on the subject was received, and it is satisfactory to be able to record that its provisions are coming to be better understood both by the people and by the officers entrusted with its working. With a view to facilitate this all the notifications and orders relating to the Act, which have from time to time been issued, have been bound up with each annual report. To turn to the statistics it may be noted that the figures in regard to mortgages go to prove that forms of mortgage permitted by the Act are coming into use, and they also disclose a rise in the mortgage value of land, as compared with the previous year. As to the effect of the Act on the sale price of land it is too early as yet to draw any satisfactory conclusions. The area of land redeemed showed a decrease on last year's figures, but this was probably due to the comparative inferiority of the harvest, and whatever the amount, it represented land really freed from encumbrance, and not a mere nominal redemption for the purpose of remortgaging. To sum up it may be said that the prominent features of the year were that the depreciation in the value of the land, which had been observed at first, was arrested, and that money-lenders began to accept mortgages in the forms prescribed by the Act. The rules under the Act worked well and smoothly, but further detailed instructions on subsidiary points were required. There is reason to believe that extravagance on ceremonial occasions was checked, and signs were not wanting that capital so set free was being diverted to more productive channels. The statistics have not yet shaken themselves clear of the effect of transactions antecedent to the Act, and the time has not come to generalise upon the consequences of applying the principle of one district one group. It has however to be accepted that the Act has strengthened the position of the rich zamíndár and has bettered his prospects of acquiring the lands of his neighbours. Finally, so far as experience has shown up to date, the Act is fulfilling its purpose very well, and that without appreciable increase of official labour. The chief defect has proved to be the wholly artificial status of the agriculturist, founded on nothing which is any real part of the structure of society.

Descent of Jagirs Act, No. IV, Punjab, of 1900.

32. Another way in which the revenue-paying classes have been affected during the year has been by the application of the Descent of Jagírs Act, No. IV (Punjab) of 1900. Here again is found an instance of the amplification of the rough and ready provisions of the Punjab Laws Act of 1872 to which reference has been made in the case of the Riverain Boundaries and the Court of Wards Acts. The object of the new legislation has been to arrest the sub-division of jagír tenures, and to place upon a definitely legal basis certain matters connected with jagír administration which had previously been regulated by loosely defined custom. Since the Act was passed nearly all the big Jagírdárs have been brought under it, except in the Ambála District, where an attitude of suspicion is said to prevail. In all, eleven notifications under the Act were issued in 1902-03, and 41 have been published during the present year. The Jagírdárs obtain by coming under the Act the very substantial advantage that their assignments cannot be attached by order of a Court in satisfaction of a decree, and proposals are also on foot to grant adoption sanads to such of the more deserving men as have accepted the rule of primogeniture. On the other hand, all that they are asked to do in return is to admit the existence of certain obligations, which may never before have been reduced to writing, but which Government have never hesitated to enforce. It is on this latter point that the negotiations in the Ambála District have come to a standstill, but the Jagírdárs there have received an assurance that no change of policy is intended, and it is hoped that this will satisfy the objectors.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports :—

Police.—Report on the Police Administration of the Punjab for the year 1903.

Report on the working of the Criminal Tribes Act for the year 1903.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1903.

Prisons.—Report on the Administration of the Jails in the Punjab, 1903.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1903.

Registration.—Note on the Registration Returns of the Punjab for the year 1903.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1903-04.

Local Boards Administration.—Report on the working of the Local Boards in the Punjab during the year 1903-04.

And in the following tables of the Volume of Judicial and Administrative Statistics of British India, Fighth Issue, 1904, *viz.* Police (Tables VII), Criminal Justice (Tables IV), Jails (Tables V), Civil Justice (Tables III), Registration (Table IX) and Municipalities (Tables XVII).]

17. Legislating Authority.

(See pages 83 and 84 of the report for the year 1901-02).

18. Course of Legislation.

Supreme Legislative Council.

33. None of the enactments, which were passed by the Supreme Legislative Council during the year, were solely applicable to the Punjab.

Meetings of Punjab Council.

34. Only two meetings of the Punjab Legislative Council took place during the year, *viz.*, on the 11th May 1903 at Lahore and on the 23rd December 1903 at Lahore.

Pending Bills.

35. The following Bills were introduced in Council at the above meetings :—

(1) A Bill to amend the law relating to the limitation of suits for the recovery of money due on account of money lent or advanced, or on an account stated, or in respect of goods supplied.

(2) Bill to amend the Sind Ságar Doáb Colonization Act, 1902.

(3) Bill to make better provision for the control and management of Minor Canals in the Punjab.

Acts.

36. The Bill to consolidate and amend the law relating to the Court of Wards in the Punjab was passed in Council on the 11th May 1903, and it received the assent of the Governor-General on the 12th June 1903. The Bills mentioned above as having been introduced during the year were pending on the 31st March 1904. The Bill to amend the law relating to pre-emption in force in the Punjab, introduced by the Hon'ble Sir Lewis Tupper in Council on the 17th January 1902, was withdrawn by him on the 23rd December 1903.

Members of Punjab Council.

37. The following changes took place amongst the Hon'ble Members during the period under report:—

The seat of the Hon'ble Sir Imám Bakhsh Khan, K.C.I.E., fell vacant on his death on the 13th September 1903.

The Hon'ble Mr. J. Wilson resigned his seat.

The Hon'ble Kanwar Sir Harnám Singh, K C. I. E., also vacated his seat on the expiry of his term on the 13th November 1903.

The seats of the Hon'ble Mr. (now Sir) D. P. Masson and the Hon'ble Colonel J. B. Hutchison became vacant owing to the expiry of their term of office, and they were re-appointed for a further term of two years.

The Hon'ble Miyán Muhammad Shah Dín, the Hon'ble Mr. J. M. Douie, the Hon'ble Mr. J. Benton, the Hon'ble Kanwar Sir Ranbír Singh and the Hon'ble Honorary Major Rája Jai Chand were appointed to fill vacancies.

19. Police.

Condition of crime.

38. The generally favourable agricultural conditions which prevailed during the year, together with the general cheapness of food-grains and steady prices, have reflected on the criminal record of the Province and produced a substantial drop in cognizable offences reported to and investigated by Police Agency. Cases reported direct to Magistrates have, it is true, increased, but from the fact that, broadly speaking, only 1 out of every 21 of such cases results in a conviction, it is a fair inference, and one which has the support of the statistics for several years, that very little true cognizable crime is brought to notice except through the Police, and that it is to the Magistrate that the man goes who wishes to harass his enemy or gratify his desire for litigation. Serious offences against the person have decreased in a very satisfactory manner and in particular dakaities, which stood at 151 in 1900, now figure out at 58. On the other hand, the number of murders in Ráwalpindi and Ambála has increased, and as a whole the condition of the faction-ridden trans-Jhelum portion of the Ráwalpindi Division is far from satisfactory. The passing of the Poisons Act of 1904 will, it is hoped, prove very beneficial in checking one branch of serious crime, and renewed efforts are being made to enlist the more cordial co-operation of village notables by putting the system of rewards and punishments on a more stable footing. But it is too soon as yet to discuss matters of Police reform. The subject is just now very much to the fore, and will be more fitly reviewed when the recommendations of the Police Commission have been sifted and translated into practical shape. The very appreciable decrease in burglaries, under the head of offences against property, is ascribed to decreased evacuation of village sites in case of plague, and to the fact that greater precautions for the safe custody of property were taken in the case of evacuation. Only four serious cases of counterfeiting coin came to light during the year, but a large amount of false coin was detected at Railway Stations in the Punjab and its dependent

Native States and in the North-West Frontier Province: 6,501 whole rupees of this kind were detected, 288 eight-anna pieces, 422 four-anna and 506 two-anna bits. One serious case of forgery of Government Currency Notes was brought to conviction, and three forged 10-rupee notes were sent to the Police by the Currency Office, but no clue could be established.

Preventive measures.

39. The percentage of cases carried through to conviction and the proportion of property recovered to that stolen shows some slight falling-off, but the statistics on these points are notoriously fallacious, and the undue importance often attached to them has not unfrequently a most deleterious effect on police working. With the country constituted as it is a high level of detection can never be expected. What is more important is, that a high standard of prevention should be maintained, and in this respect there are signs of successful activity. The number of punitive police posts has been increased from 6 to 18, and the striking success achieved affords ample justification for the prompt application of this remedy in all cases where outbreaks of turbulence or lawlessness occur, or where the criminal record of a tract indicates that the populace are in sympathy with criminals and fail to co-operate with the forces of law and order. Again it is satisfactory to notice that Magistrates are much more ready than they were to deal adequately with habitual offenders. Nothing is more preventive of crime than the certainty that old offenders will on reconviction be severely punished, and that repeated depredations on society will not be tolerated. In dealing with this aspect of their work the police and the courts have been much assisted by the Criminal Identification Bureau. There are now 118,070 finger-impression slips stored and classified, and during the year 4,390 references were made from the Punjab only, which resulted in the identification of 842 old offenders. Of these 432 had given false names or addresses or both, and 459 had previous convictions to their account in more than one district. Surveillance and the use of the security sections of the Criminal Procedure Code have also not been neglected, but a tendency undoubtedly exists to sweep too many suspects into the net, instead of confining attention to the really serious offenders. A strict surveillance of the latter is likely to be of more effect than the loose supervision over numerous comparatively petty misdemeanants. Similarly, in using the bad livelihood sections of the Code it is far more important that the worst characters, the leaders and organizers of crime, should be placed under adequate safeguards for considerable periods than that attention should be paid to the total numbers of orders to furnish security. Both these subjects are receiving attention. Speaking as a whole, the state of the police working is not unsatisfactory, and progress in the important qualities of honesty, discipline, confidence and vigilance is distinctly discernible. In these rather than in paper percentages is the healthiness of the administration to be found.

RURAL POLICE.

Rural Police.

40. This subject was treated of on pages 88 and 89 of the report for the year 1901-02. The village chaukídárs are still village menials, and can hardly be ranked as rural police.

CRIMINAL TRIBES.

Criminal Tribes.

41. There are ten criminal tribes in the Punjab proclaimed under the Criminal Tribes Act either throughout the Punjab or in particular districts. The most important of these are the Bauriahs, Harnis, Pakhiwárs and Sánsis. During the last two years extra attention has been paid to increasing the efficiency of the police control over the members of these tribes. In particular, registration of members of the criminal tribes has been made more thoroughly. But it was only completed towards the end of the year, and in some districts had not then been completed, so that the full effect of the extra attention can not yet be judged. Still the main features of the year's working are the very large increase in new registrations and the drop in offences under

the Indian Penal Code committed by registered persons. Thus, although 6,724 persons, mainly Sánsis and Bauriahs, have been added to the registers, the number of convictions under the Code has fallen to 135. A still more satisfactory element which the return discloses, is the fact that while exemptions have increased by 1,374 persons, only three cases of conviction are recorded against exempted persons for offences under the Penal Code during the year. While, therefore, assertions of regeneration and reform on the part of a criminal tribe must be received with due caution, there is some reason to suppose that the systematic application of the Act is beginning to make some headway, and that there is a tendency on the part of many members of the settled tribes to withdraw from crime in favour of legitimate methods of earning a livelihood. The number of absentees is still, however, abnormally high, and it is impossible to claim that the problem of dealing effectively with criminal tribes has been successfully tackled until absenteeism is reduced to a minimum and the wandering tribes are brought under adequate supervision. The latter point is receiving separate consideration, and it is not improbable that an amendment of the Criminal Tribes Act will follow as a result of the representations which have been made on the subject.

20. Criminal Justice.

General.

42. The criminal record of the Province for the year 1903 has already been considered in the foregoing section, which deals with the working of the Police Department, and, as the statistics of offences reported to and investigated by police agency furnish a truer criterion of the actual state of crime than the figures of cases which come before the courts and are necessarily inflated by innumerable complaints of a petty, false or frivolous character, there is no need to travel over the same ground again or to treat the judicial returns as a reliable index to the criminality of the population. Indeed, the figures for the districts of Hoshiárpur, Jullundur, Siálkot and Gurdáspur, which show percentages of convictions to complaints of 17, 17, 15 and 10, respectively, are a striking comment on the way the time of the courts is wasted in enquiring into cases which should never so much as reach them. As to how this abuse of the courts can be prevented is another and a more difficult matter, but the Hon'ble Judges of the Chief Court have it under consideration, and have expressed the opinion that there is no district in the Province in which the habit of having recourse to the courts in trivial disputes does not positively require such definite discouragement as can be administered by a free use of the power of summary dismissal given by the Code of Criminal Procedure.

Appellate work of District Magistrates.

43. The only other point of interest in the year's working has been the extraordinary number of appeals, which have gradually come to be lodged in the courts of District Magistrates. The figures show that in 1902 the District Magistrates of the 27 districts of the Punjab, as now constituted, disposed of more than twice as many appellants, and between seven and eight times as many applicants for revision, as the District Magistrates of the 32 districts which constituted the Province in 1882. In 1882 again only 11 per cent. of those who were convicted appealed. In 1902 the percentage was 36. The figures are the more remarkable when it is observed that they exceed those for the same class of work in the 47 districts of Bengal, and when it is remembered that a District Magistrate in the Punjab has to undergo the labour of Section 30 cases as well. The only two effective measures, *viz.*, either to curtail the power of appeal from sentences passed by 2nd and 3rd Class Magistrates or to confer the power of enhancing sentences on the courts of Sessions Judges and District Magistrates, are, under existing conditions, out of the question, and no other effective remedy appears to be forthcoming. Otherwise the general condition of the work of the criminal courts is satisfactory, and there are ample indications that habitual and professional criminals are being far more adequately dealt with than has hitherto been the case.

21. Prisons.

General.

44. Two new jails were opened during the year, *viz.*, Lyallpur and Miánwáli; while two other jails, Múng Rasúl and Dharmsála, were closed as such. The jail at Dharmsála was converted into a lock-up. The total jail population and also the number of convicts admitted exhibit a decrease over the previous year, while the daily average number of convicts has fallen from 12,005 to 11,271. The releases and remissions of sentence granted on the occasion of the Coronation Darbár account for this. The total jail accommodation, excluding the accommodation in hospitals and observation cells, is sufficient for 12,912 convicts and 845 undertrial prisoners. There was thus sufficient accommodation for the daily average population, but not enough margin of accommodation for the population which had sometimes to be provided for and which was considerably in excess of the average figure. The overcrowding which on such occasions took place in the larger prisons has emphasised the need for a new Central Jail in the southern portion of the Province, and a site for one is under discussion. Notwithstanding the overcrowding, the health of the prisoners has been good, and the death-rate has fallen from 25·06 to 19·18 per thousand. With a death-rate amongst the free population of 49 per thousand this is a remarkable testimony to the sanitary condition of the jails, and this is made clearer when it is added that throughout the year the jail population has been practically immune from plague. The decline (8 to 6) in the number of escapes, concurrently with the substantial decrease (3,530 compared with 4,085) in the number of cases in which fetters were imposed for safe custody, speaks well for the general efficiency of the subordinate establishment, and the fall in the average cost per head on guarding and maintenance from Rs. 66-7-0 to Rs. 63-7-3 is a satisfactory indication that the department is being conducted on a business-like basis.

Classification of prisoners.

45. On the other side there is still much room for improvement on the part of the courts in the work of classifying the prisoners. The importance of this may be gathered from the strikingly disproportionate extent to which the habitual class of convicts, who form only 12 per cent. of the jail population, contribute to the number of punishments inflicted in jails, and when the distinction between casuals and habituals is carelessly made, and habituals are recorded as casuals or casuals as habituals, there is every danger of contamination in the former case to the casual population and in the latter to the individual. The matter is receiving careful consideration.

Juvenile offenders.

46. The same question of contamination is raised in the case of juvenile offenders. Special measures were taken last year to draw the attention of all courts to this important matter, and their attention was invited to the provisions of Section 562, Criminal Procedure Code, and to those of the Reformatory Schools Act. The figures for the present year do not show the effect of this warning, but it is hoped that next year there will be a marked improvement. The Reformatory School was established at Delhi in October 1903, and it should have the effect of reducing the number of juvenile prisoners committed to jail.

Sentences of transportation.

47. Special measures have also recently been taken to urge the courts to give sentences of transportation in the case of habitual offenders, whether for life or for a term of years. It is gratifying to notice that during the year such punishments have risen from 160 to 207, but it is as yet too early to say whether this increase is fortuitous or marks a real improvement in the working of the courts. On the whole, the Jail Department is in a very satisfactory condition, and there are ample indications that the efforts made to keep it in a high state of efficiency and to co-ordinate its working with that of the courts are bearing fruit.

22. Civil Justice.

Institutions.

48. Compared with the figures of 1902 there was a decrease during the year of 4,986 in the number of original suits instituted in civil courts, excluding Divisional Courts and the Chief Court. The largest decreases occurred

in Siálkot (1,537) and Multán (1,124). The largest increase occurred in Hoshiárpur (924). Excluding the year 1901, during which activity in litigation was greatly stimulated by apprehensions regarding the probable effect of the Land Alienation Act, there has been a steady decrease in the volume of civil litigation since the year 1896, and although that Act appears to be the principal factor in producing the drop in institutions now observable, it is also probable that other causes, notably plague, have contributed to this result. Agricultural conditions appear to form an uncertain criterion to apply to civil litigation, for, although generally speaking bad years should give rise to debt and good years to realizations, the fluctuations in institutions do not support this theory with any marked consistency. Until therefore experience has gauged the full effects of special legislation and plague, it is impossible to determine whether civil litigation in the Province is really on the wane, or whether the volume of business now disclosed approximates to the normal or not. That the Land Alienation Act has recently proved a potent factor in reducing litigation is evidenced by the marked drop in suits brought by money-lenders against agriculturists (from 100,449 to 93,900) and in suits to establish a right of pre-emption (from 3,537 to 2,977).

Disposal of suits.

49. Notwithstanding this decrease in the number of institutions the pending file at the end of the year was not materially reduced. Disposals fell short of the preceding year by 6,402 and the pending file still exhibits the large number of 29,137 suits, a decrease of 618 cases only. The average duration of cases both contested and uncontested has also risen from 45 to 50 and 27 to 30 days respectively, though this may be due to some extent to a change in the method of calculating the duration of cases, recently prescribed by the Chief Court. Various reasons have been advanced for these disappointing results; and a partial remedy at any rate may be found by making some redistribution of work between districts.

Chief Court.

50. As regards the Chief Court itself, the efforts made to expedite the disposal of work by extending the civil appellate jurisdiction of Single Benches have proved quite inadequate to remove the serious congestion of business which exists. The powers of Single Benches have been raised to the highest limit to which, in the opinion of the Judges, they can properly be raised. The subject is under the consideration of Government, and it is hoped that it will be possible before long to provide adequate assistance to enable the Court to cope with the burden of arrears which the report of the present year discloses.

General.

51. The training of junior Assistant Commissioners in their judicial duties by attaching them to the courts of District and Sessions Judges is receiving the careful attention of the Chief Court and the results are realising their expectations. The policy of detailing officers for civil judicial work only was extended during the year, and now there are 11 District Judges and 2 Extra Assistant Commissioners employed exclusively on civil work. The results are considered satisfactory. The average duration of cases is less, the number of hearings fewer, and the litigants can count on having their cases heard on the dates fixed for hearing instead of having them postponed to make room for criminal work.

Execution of decrees.

52. The results of execution proceedings are still disappointing, although the percentage of realizations (24 per cent.) is a slight improvement on that of the preceding year. A considerable number of decrees are privately satisfied, and due allowance must be made for realizations which never find their way into the registers.

23. Registration.

General.

53. The calendar year has now been adopted for the purposes of Registration Returns, and the business of the Department is reviewed every three years. The next triennial report is due in 1904. The only matter of interest raised by

the statistics of the present year is the indication afforded by the rise in the number of compulsory registrations of immoveable property from 50,948 to 55,451, that business is reviving from the first depressing effect of the Punjab Alienation of Land Act, the provisions of which were in the beginning very much misunderstood. Progress is also being made in the work of concentrating registration records, and new central record-rooms were completed at Ludhiána and Jullundur. There is nothing else worthy of remark.

24. Local Boards Administration.

Constitution of District and Local Boards.

54. No changes were effected in the year under report in the number of Local Boards in the Province. In Muzaffargarh representative circles were formed by grouping together similarly circumstanced zails. Elsewhere no changes have occurred in the system of appointing members to District Boards.

Elections.

55. The only district where any interest was displayed in the elections to vacancies on the District Board was Karnál. Generally appointment is considered more honourable than canvassing for votes.

Meetings of District Boards.

56. The prevalence of plague and the absence of business accounted for a failure on the part of the District Boards of Gujránwála and Ambála to meet the prescribed number of times. Only three ordinary meetings were held also by five other District Boards, *viz.*, Kángra, Sháhpur, Jhelum, Ráwalpindi and Lahore. On the other hand, the attendance at District Board meetings in the districts of Rohtak, Gurgaon and Hoshiárpur improved, and a satisfactory disposition to work was displayed elsewhere.

Working of District Boards.

57. The general working of the District Boards has been satisfactory, and although in most districts the actual work is done by the official members, there are exceptions to this rule. Village sanitation is now claiming the attention of some of the Boards; and Sub-Committees have been formed in most districts, thereby interesting members in special departments of work.

Rules.

58. The only rules framed during the year calling for notice concerned a revision of the rules regulating the fees payable by Boards for services rendered by the Sanitary Engineer or Public Works Department.

25. Municipal Administration.

New Municipalities established and old Municipalities abolished.

59. Miánwáli has been constituted a second class Municipality during the year under report, and Gojra in the Jhang District has been declared a Notified Area, represented by 4 members. No other changes have occurred.

Changes effected in the system of appointing members.

60. Nomination has been substituted for election in the Municipalities of Bhiwáni and Sáhiwál. The constitution of the Sujánpur (Gurdáspur) Committee was changed in order to equalise the number of Hindu and Muhammadan representatives. The rental qualifications of voters was raised in Amritsar proper.

Election and appointment of new members.

61. Two hundred and seventy-nine vacancies in elective seats occurred during the year; 175 old members secured re-election, and 76 seats were filled by new candidates. The remaining 28 seats were either left unfilled owing to the occurrence of the vacancy at the close of the year, or of the retiring candidates' term of offices, or were filled by nomination. Although 309 candidates (excluding those for the Jullundur Division, for which figures are not available) were nominated for the vacant seats, only 95 contests actually took place throughout the Province.

Proportion of elected and nominated members.

62. Eight elective seats are reported to have been filled by nomination owing to the lack of candidates during the year. Changes have consequently been entailed in the proportionate number of seats held by elected and nominated members in Ballabgarh, Kaithal and other Municipalities.

Meetings of Municipal Committees and attendance at meetings.

63. The number of meetings held and the attendance of members thereat has on the whole been satisfactory during the year under report. The Committees of Simla, Delhi and Zafarwál met 56, 52 and 51 times respectively. The Ambála Committee met 48 times and that of Multán 36. Amritsar and Mukerián had 29 and 28 meetings respectively, Lahore and Máchiwára 22, Murree and Ráwalpindi 22 and Una 20 meetings. On the other hand no less than 28 Committees failed to hold the prescribed number of meetings. In many of the minor Municipalities the prevalence of plague and the absence of business is pleaded as an excuse, but it can only be due to the apathy of the members that 3 meetings of the Ferozepore Municipality had to be adjourned for lack of a quorum. The Notified Areas of Shádiwál and Sháhpur Civil Station held no meetings during the year under report, while that of Rámdás held 1 only.

General working of the Committee.

64. Sub-Committees are now generally in operation, and they are reported to have relieved the General Committees of much routine work. In the Lahore Municipality, however, it is noticed that valuable time is lost by relegating to them business which ought to be disposed of by the General Committee itself. The proceedings of Committees were overruled in 11 cases during the year. None of the cases call for any special notice. Generally speaking, the working of the Committees for the year is reported to be satisfactory, but there are many exceptions, in which the members are more actuated by party feeling than public spirit, while the management of the Sadhaura, Tánda, Sháhabad and Palwal Committees is very adversely spoken of.

Rules framed by Government or by the Committee.

65. Bye-laws regarding the collection and refund of octroi were framed during the year in Delhi, Leiah, Ráwalpindi, Pind Dádan Khan and all Committees of the Hoshiárpur District; Delhi, Simla, Jhajjar, Bahádurgarh, Gohána and Hidáyatpur Chhaoni passed bye-laws dealing with slaughter-houses and the sale of meat. In Jullundur the Conservancy Dárogha was invested with the powers of a Police Officer under Section 34 of Act V of 1861. Building bye-laws were passed in Kángra. A number of bye-laws have been passed and others are under consideration in the newly constituted Municipality of Miánwáli. The Simla Municipality also passed bye-laws dealing with the water-supply and vaccination.

TAXATION.

Imposition of new and withdrawal of old taxes.

66. The only changes in the year occurred in the Delhi Division, where the house-tax levied in Bhiwáni Municipality was discontinued and sanction given to the levy of a house-tax in the Ambála Municipality in lieu of the existing water-tax which, as noticed last year, never worked smoothly. The rates of the house-tax levied in the Budhláda Notified Area have been raised to figures varying from Rs. 15 to annas 8 per annum according to the means of the owner. The revision of the octroi schedules of all Municipalities has been held in abeyance pending the decision of the Government of India as to the maximum rates to be levied on the various classes of commodities.

Total income from taxation.

67. The total income derived from rates and taxes in all the Municipal and Notified Areas during the year amounted to Rs. 34,44,400, showing an increase of Rs. 1,55,000 over last year's collections. Collections from octroi amounted to Rs. 30,44,000, and accounted for almost the whole of this increase, though there were also substantial increases in the returns of house-tax. The profits of the water-tax and tolls on roads and ferries declined. The reaction after the inflated figures of the Darbár year accounts for a fall of Rs. 36,000 in the octroi income of Delhi; while the scare of plague and the partial desertion of the city consequent upon it is said to explain a similar decline of Rs. 34,000 in Ráwalpindi. The octroi recoveries of Amritsar, Simla and Lahore increased by Rs. 47,000, Rs. 30,000 and Rs. 28,000 (in round figures) respectively; these increases were mainly due to good harvests and improved administration.

Incidence of taxation.

68. The average incidence of all taxation was Re. 1-8-0 against Re. 1-7-0 in the previous year. That for octroi, Class I (grain), was Re. 0-12-10 as against Re. 0-12-1 and of total octroi Re. 1-5-6 against Re. 1-4-6 recorded last year. The incidence of total taxation in Delhi declined from Rs. 2-1-4 to Re. 1-15-6, but in Amritsar and Lahore it rose to Rs. 2-6-10 and Rs. 2-8-3 respectively. In Simla it stood at Rs. 11-2-10, in Kasumpti at Rs. 20-1-2, in Dalhousie at Rs. 8-8-0 and in Murree at Rs. 6-6-0. These figures all show increases on those of last year. The general upward tendency suggests that the population is able to bear more than the prescribed standard of Re. 1 per head without difficulty.

Octroi.

69. The general working of the octroi tax was satisfactory. The question of collection is receiving special attention in Lahore and Siálkot, where considerable room for improvement existed; the causes of the more noticeable increases and decreases and the question of the revision of schedules have already been noticed. The cost of collection as is to be expected varies roughly in an inverse ratio with the proceeds of the tax. It varied in the year under report from 53 and 45 per cent. in the Notified Areas of Shádiwál and Rámdás, and 31 per cent. in the Municipalities of Jhelum to Rs. 5-2-1 per cent. in Delhi and Rs. 4-2-10 per cent. in Lahore. It is satisfactory to note that both in Lahore and Amritsar the cost of collection has declined in the year.

Other taxes.

70. From Delhi it is reported that the tax-payers have become accustomed to the house-tax which was so unpopular at its first institution. Direct taxation is seldom popular, but no special difficulties calling for note have occurred in the year.

Refunds.

71. The question of refunds has received attention in most Municipalities where the system is in force, although the general overhauling of the system is deferred until the revision of the octroi schedules is complete. Faridabad and Sonepat have framed refund rules during the year, and the rules of the Delhi Municipality, which refunded a percentage of Rs. 4-11-4 on the gross realisation, were revised. The Hoshiárpur Municipality refunded only 2·95 per cent. and was apparently unable to meet its claims. Ferozepore is again unfavourably noticed, and the refunds amounted to only 1·20 per cent. of the gross recoveries, and in Jagráon and Fázilka through trade continues to be taxed. In Amritsar, the great centre of through trade, the refunds amounted to 14 per cent., and claims amounting to Rs. 4,465 only were left pending at the close of the year. The operations of the bonded warehouses call for no special remark. In many places traders prefer to store their goods in private warehouses outside Municipal limits in order to avoid demands for rent and in some cases to secure better facilities for gambling on their goods.

GENERAL.

Plague and health of towns.

72. Plague was again prevalent in almost all the Municipal towns of the Delhi, Jullundur and Lahore Divisions; in the Multán Division, beyond a few imported cases in Multán itself, Maghiána was the only Municipality visited, and there the ravages of the disease were severe. It increased largely in the Ráwalpindi Division, and its appearance in Ráwalpindi created a panic which resulted in the flight of the greater part of the population. It is to be regretted that on the outbreak of the disease in Bhera most of the members of the Committee deserted the place, and the few that remained rendered no assistance. Of the larger towns Amritsar and Lahore both suffered considerably. The danger of loss of goods left unprotected is a great obstacle in the minds of the much tried people of the Jullundur District, against the evacuation of their houses, when plague has occurred. Cholera appeared sporadically; there were 91 cases in Delhi. Cases of small-pox also occurred.

Fires.

73. An outbreak of fire occurred in a cotton factory at Hissar and a severe fire occurred at Sohna, while in Amritsar losses estimated at Rs. 23,410 are reported to have occurred from the same cause; in Dharmsála a serious fire resulting in the destruction of many valuable records occurred in the District Offices.

26. Military (Volunteers).

Strength and distribution of Volunteer Force.

74. The strength of the Volunteer Corps on the 31st March 1904 is reported to have been as follows:—

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant-Instructors.
Punjab Light Horse.	...	Field Officers and Staff	5	...	...	5	5	4
	A	Lahore	3	7	38	48	45	
	B	Ambála	2	8	39	49	49	
	C	Ráwalpindi	3	8	56	67	65	
	D	Pálampur	1	1	6	8	7	
	...	Reservists	2	2	46	50	39	
		Total	16	26	185	227	210	4
1st Punjab Volunteer Rifle Corps.	...	Field Officers and Staff	7	2	...	2	2	10
	A	Lahore	2	18	51	69	60	
	B	Lahore	2	10	62	72	67	
	C	Lahore	2	7	52	59	59	
	Half Company Cadets	Ditto	...	4	43	47	47	
	D	Ráwalpindi	2	6	120	126	124	
	E	Amritsar	2	7	29	36	36	
	F	Delhi	3	2	28	30	30	
	G	Murree	3	3	57	60	60	
	H	Ditto	2	6	32	39	37	
	K	Ferozepore	...	7	42	49	49	
	L	Siálkot and Srinagar	3	6	44	50	50	
	I	Dharmsála	1	...	11	11	11	
	...	Reservists	2	...	83	83	42	
	...	Add for Active Officers	...	...	...	28	25	
	...	Add for Supernumerary Officers	...	...	...	19	3	
		Total	31	78	655	780	702	10
Simla Volunteer Rifles.	...	Field Officers and Staff	5	...	...	5	4	3
	A	Simla	3	9	41	53	51	
	B	Simla	2	11	86	99	94	
	C	Simla	2	8	35	45	44	
	D	Simla	1	8	34	43	43	
	E	Simla	2	10	79	91	88	
	Det.	Kasauli	1	...	15	16	16	
	...	Reservists	1	1	50	52	13	
	...	Honorary and Supernumerary Members	2	...	...	2	...	
		Total	19	47	340	406	353	3
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	10	...	...	10	10	13
	A	Karáchi to Jungshahi	3	8	62	73	73	
	B	Khánpur to Montgomery and Rojhanwáli	2	12	119	133	133	
	C	Lahore	9	14	163	186	182	
	D	Pathánkot to Lála Músa	4	14	75	93	91	
	E	Jullundur to Ambála and Bhatinda	1	5	62	68	68	
	F	Saháranpur to Gháziabad and Jhind	1	9	122	132	132	
	G	Kotri to Radhan	2	7	68	77	77	
	H	Pathánkot to Lála Músa	3	12	107	122	122	
	I	Jacobabad to Quetta	4	9	57	70	70	
	K	Jhelum to Peshawar	6	19	107	132	132	
	L	Rohri to Rohk	7	12	83	102	102	
	M	Karáchi City	1	3	66	70	70	
		Total	53	124	1 091	1,262	1 262	13
		GRAND TOTAL	119	275	2,271	2,675	2,527	30

Inspections.

75. The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps and the North-Western Railway Volunteer Rifles were inspected in March 1904, and the Simla Volunteer Rifles were inspected in September 1903. The results were considered satisfactory.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

Agriculture.—(1) Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1903.

(2) Annual Report of the Experimental Farm, Lyallpur, for the kharif and rabi seasons 1902-03.

(3) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1903-04.

(4) Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1902 to 30th September 1903.

Weather and Crops.—(1) Report on the Meteorology and Climatology of the Punjab for the year 1903-04.

(2) Punjab Season and Crops Report for 1903-04.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1904.

Forests.—Progress Report on Forest Administration in the Punjab for 1903-04.

Manufactures.—Report on the working of the Factories Act during the year 1903.

Mines and Quarries.—(1) Reports on the working of the Dandot Colliery for the half-years ending 30th June 1903 and 31st December 1903.

(2) Statement showing the produce of minerals and gems for the calendar year 1903.

Manufactures —Report on the working of the Factories Act during the year 1903.

Trade.—(1) Annual Returns of the Internal Land Trade of the Punjab for the year ending March 31st, 1904, and the review of the progress of trade during the past triennium.

(2) Report on the External Land Trade of the Punjab for the year 1903-04.

(3) Report by the Registrar of the Joint Stock Companies on the working of the Joint Stock Companies in the Punjab during the year 1903-04.

Irrigation.—Revenue Report of the Irrigation Department in the Punjab for the year ending 31st March 1904.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agriculture.—Prices and Wages in India, 21st issue, 1904.

Weather and Crops.—Agricultural Statistics of India, 18th issue, Tables 3 II, 4-H, 7, 7-A, 9 and 10-E.

Mines and Quarries.—Statistics of Mineral Production in India, 6th issue, 1904.

Report of the Chief Inspector of Mines in India under the Indian Mines Act (VIII of 1901) for the year ending 31st December 1903.

Manufactures.—Judicial and Administrative Statistics of British India, Table XIX.

Railways.—Administration Report on Railways in India for the Calendar year 1903.

Trade.—Accounts of the trade carried by rail and river in India, 16th issue, 1904.]

27. Agriculture.

Experimental Farm.

76. Special attention has been devoted during the year to the working of the new experimental farm at Lyallpur in the Chenab Colony. The Punjab being the principal wheat-producing Province in India, this crop has naturally been the object of most careful study. The classification of the various kinds of wheat grown is in progress, and wheat variety experiments have been advanced a stage, and a certain number of varieties have been selected as superior kinds suit-

ed to the colony. Messrs. Ralli Brothers have given useful help in this matter by examining and appraising the value from a commercial point of view of various samples. Cotton too has been carefully attended to, and the encouraging results which were obtained last year from American cotton at Hissar, have been repeated at Lyallpur, where the experiments will in future be conducted. Agricultural shows have been inaugurated at Lyallpur and Ferozepore, and though they were not very successful, this was hardly to be expected at a first attempt. Efforts have also been continued to improve the cultivation of the date palm, and it has been established that nothing can be expected from the present haphazard system of cultivation followed in the Province, where the tree is self-produced and is left very much to its own devices. If success is to be obtained systematic cultivation must be practised.

Veterinary and Live Stock. Punjab Veterinary College.

77. The competition for admission to the Veterinary College at Lahore has largely increased, and the supply of Veterinary Assistants is still not in excess of the demand. The difficulty lies rather in training sufficient men. When the College is amalgamated with the Veterinary College at Ajmir, as is now contemplated, there should be an even greater activity.

Civil Veterinary Department.

78. The Army Remount and the Civil Veterinary Departments have now been definitely separated, and the latter has been reorganised to deal almost exclusively with cattle. The need for this has long been apparent, as cattle disease in its various forms is always virulent in the Province. Inoculation for rinderpest, which has now passed beyond the experimental stage, is winning the confidence of the people, and efforts are being made to obtain a larger supply of serum. Satisfactory progress has been made generally in the development of Veterinary Hospitals and Dispensaries. The number of Veterinary Assistants has been increased, and a new grade of 6 Inspectors has been sanctioned to control them. Two Superintendents have also been allowed for, and the Department is one from which, in its reorganised condition, much good may be expected in a field which has hitherto been only too scantily explored.

Agricultural pests.

79. The continuous cloudy weather of February and early March caused a good deal of rust on the experimental farm at Lyallpur, and the opportunity was taken to submit samples to the Cryptogamic Botanist to the Government of India. The nature of the rust was successfully analysed, but no remedy could be suggested beyond the endeavour to develope the inherent power of the wheat plant to resist the disease by selection and hybridization. No other special troubles of this nature were reported.

Loans to Agriculturists.

80. The question of simplifying the accounts which have to be kept up in all cases of loans to agriculturists is under discussion, as are also the methods by which well construction may be encouraged. Otherwise the year has been one of little incident. The drought in the Hissar and Rohtak Districts of the Delhi Division resulted, of course, in considerable activity in operations under the Agriculturists' Loans Act, but this is always the case when seasons have been unpropitious.

Prices.

81. A new statement, No. V, has been added to the season and crops report during the year to exhibit the wholesale prices per maund at Delhi, Lahore, Multán and Ráwalpindi for rice (unhusked), wheat, barley, jowár, bájra, maize, gram, rape, raw sugar, cleaned cotton and jowár stalks. The statement also shows retail prices per maund for firewood and salt. The result is that, generally speaking, there has been a marked steady downward tendency in the case of food-grains, rape, straw and fodder; whilst raw sugar has fluctuated, and cleaned cotton owing to speculations in America and the part failure of the American crop has risen steadily, and has finished over Rs. 6 per maund dearer than at the beginning of the year. The price of firewood remains unchanged at Multán and Delhi, but is still rising in Lahore and Ráwalpindi. The export figures for wheat during the year established a record, being over 23 million maunds as compared with over 14 millions in 1902-03.

28. Weather and Crops.

General.

82. The monsoon broke on July 15th, when copious rain fell all over the Province, and continued throughout August. Then from September 10th to 12th there was a further adequate downpour. Thus the season was one of a rather late monsoon, well sustained throughout August, followed by a seasonable fall at a time when it was most beneficial for the kharíf harvest as well as for rabi sowings. The result was an all-round good kharíf harvest, except in a few tracts which missed the general rainfall, and the crop was returned as an 18-anna on an average of one rupee. The winter rains were also generally good, and the spring harvest was also much above the average, the failed area amounting to only 10 per cent. as against 19 per cent. last year. Only Delhi, Gurgaon and parts of Rohtak and Ferozepore suffered from want of rain, whilst a disastrous epidemic of plague in the Shahpur District scattered the newly arrived colonists on the Jhelum Canal, and much of the crops was lost owing to excessive delay in harvesting. The remarks under this section refer, it will be noticed, to the kharíf harvest of 1903 and the rabi harvest of 1904. The land revenue administration report refers to the conditions prevailing in the kharíf and rabi of 1902-03.

Distribution of Crops.

83. The area under the spring crops has risen since last year owing to climatic conditions from 54·1 to 56·6 per cent., the most noticeable increase being under the head of gram, which covered 11·4 in place of 9·6 per cent. The area under maize in the kharíf was contracted owing to the late monsoon, which also prevented the expansion of the cotton crop, which might otherwise have been expected. In the Hánsi Tahsíl of the Hissar District, however, it is worth noticing that cotton has entirely displaced rice, and this crop has also increased in popularity in the Lahore District. The change in the former has resulted in a very marked improvement in the health of the people.

Irrigation.

84. The area irrigated from all sources rose by 325,345 to 9,678,885 acres during the year, and it may be calculated that about 46 per cent. of the normally cropped area in the Province is now protected in this manner. Of this about 25 per cent. is due to canals and the rest to well and tank irrigation. The good rainfall of course somewhat contracted the area which needed water, but in spite of this new canals and wells continue to swell the area under protection.

29. Horticulture.

General.

85. The Shahdara, Shálimár, Kudsia and Roshnára gardens continue to be kept up, but at a loss, and there has been the usual distribution of young fruit trees from the Mahásu Orchard. Special activity has been shown in the management of the Lahore Agri-Horticultural Gardens, to which a grant of Rs. 20,000 was made during the year, to be expended under the directions of a Committee, with a view to making the gardens worthy of the capital of the Province. New roads have already been made and old nurseries cleared, and the conservatories have been properly fitted up. The work is still in progress and is receiving attention.

30. Forests.

Alteration in area. Reserved Forests.

86. The area of Departmental Reserved Forests underwent a net decrease of 25,765 acres (40 square miles). In Shahpur 26,307 acres were "disforested" for colonization and canal purposes, in Multán 13 acres for the canal and in Jhelum 109 acres in favour of villagers. On the other hand, there were increases aggregating 664 acres owing to corrections of returns and river action.

Protected Forests.

87. The Protected Forests show a net decrease of 7,726 acres (12 square miles) principally due to the notification of 7,911 acres in the Gurdáspúr District under Chapter IV of the Forest Act and to the fact that 15,469 acres in Multán were "disforested" and made over to the Irrigation Department.

Unclassed State Forests.

88. Under "Unclassed State Forests" 26,195 acres (41 square miles) were added in Shahpur after "disforestation" from Reserved Forests pending transfer to the Colonization and Canal Departments. In Shahpur and Lahore 85,585 acres (134 square miles) were made over to the Colonization Officers and in

Montgomery 26,064 acres (41 square miles) were made over to the Civil Department for cultivation purposes. In the Gurdáspūr District 7,911 acres of Unclassed State Forests were transferred to Protected Forests. There was a net decrease of 93,957 acres (147 square miles) in the area of Unclassed State Forests during the year.

Leased Forests.

89. The area of the Leased Forests decreased from 347,007 acres (542 square miles) at the commencement of the year to 345,115 acres (539 square miles) at the end of the year. These leased forests had in previous reports been erroneously classed under Reserved and Unclassed State Forests. The total area of the different classes of forests under the Forest Department at the close of the year was—

	Acres.	Square miles.
Reserved Forests	1,226,535	1,916
Protected Forests	3,141,654	4,909
Unclassed State Forests	1,224,888	1,914
Leased Forests	345,115	539
Total	5,938,192	9,278

Forest Settlements.

90. The Shahpur Kandi Forests, 12 square miles, were declared Protected Forests. Final orders on the settlement of Chhota and Bara Bangáhal Forests were issued during the year. Orders in the cases of the jágír forests of Kángra and of the Bhedpur forest of Shahpur have not yet issued.

Reserves for Camel Corps.

91. Five areas of Unclassed State Forests, aggregating 15 square miles in the Montgomery District, required for Sillahdar Camel Corps browsing were notified as proposed Reserved Forests.

Demarcation.

92. During the year 339 miles of boundaries were newly demarcated and 2,876 miles were repaired. The total expenditure was Rs. 5,748 as compared with Rs. 3,412 in 1902-03.

Surveys.

93. Survey operations were conducted by the Imperial Forest Survey Branch in the Jhelum and Lahore Divisions where detailed surveys (4″ scale) of 183 and 26 square miles and boundary surveys (4″ scale) of 1,370 and 386 linear miles, respectively, were made.

Working Plans

94. The provisions of Working Plans were, generally speaking, adhered to. No new Working Plans were sanctioned during the year. The Kángra Working Plan was completed. In Bashahr 68 square miles in the Sutlej Valley and 117 square miles in the Pabar Valley were taken in hand during the year in addition to the 29 square miles of the previous year. Plans for the Hill States of Theog, Biláspur and Mailog were sanctioned during the year, so that now Working Plans have been completed for ten of the Simla Hill States and are still required for six. For eight small States no Working Plans are required. A revised Working Plan for the Shahdara Plantation was sanctioned during the year.

General protection.

95. There were 4,484 cases of forest offences as compared with 4,017, the average of the three preceding years. The increase being principally in cases compounded in Jhelum and Kángra. The total number of cases put into Court was 1,031 as compared with a similar average of 1,146. Of the 902 cases disposed of during the year, 772 or 85 per cent. were convicted and 130 acquitted. Under Section 67 of the Forest Act 3,276 cases were compounded for Rs. 7,843-7-3, the average amount per case and per person being Rs. 2-6-4 and Re. 1-8-4 respectively as compared with Rs. 3-8-1 and Rs. 2-1-11, the average of the three preceding years.

Protection from fire.

96. During the year 227 fires occurred burning 6,940 acres against 203 fires and 17,938 acres in the previous year. The year for the forests in general was a favourable one. The precentage of area burnt to the total area under the Forest Department was 0·1 as compared with 0·3 in 1902-03 and 0·2 in 1901-02.

97. The areas closed and opened to grazing were as follows :— Protection from cattle.

Year.	*Entirely closed.*	*Partially closed.*	*Open.*
	Square miles.	Square miles.	Square miles.
1902-03	657	1,153	7,671
1903-04	698	1,048	7,532

98. The year was a bad one for deodár, a large proportion of the seed collected having been attacked by insects. Cultural operations are conducted in all the Divisions, hills and plains, the opening balance of areas under this treatment was 6,475 acres, the additional areas treated were 2,373 acres, 2 acres were transferred to "Plantations" and 2,912 struck off as failure. Reproduction, Natural and Artificial.

99. The raising and planting of Robinia seems likely to prove a failure, that of Spanish chestnut is still a success in some Divisions and several species of Eucalyptus are successful in Chánga Mánga. Plants of Podophyllum emodi are still alive in Ráwalpindi and some in Chamba are doing well. An experiment with the bamboo (D. Strictus) in Jhelum failed. Experiments.

100. The following statement gives a summary of the produce removed from the forests during the year under report :— Outturn of Forest Produce.

	Timber.	Fire-wood.	Bamboos.	Grass.	Grazing.	Minor produce.
	Cubic feet.	Cubic feet, solid.	Number.	Rs.	Rs.	Rs.
Reserved Forests	483,146	3,547,779	901,123	36,110	119,428	15,819
Protected Forests	1,452,685	18,354,359	26,819	26,735	173,884	61,778
Unclassed State Forests ...	232,743	2,429,163	51,687	631	61,130	9,327
Leased Forests	2,250,728	2,956,237	...	18,032	17,434	16,693
Total for 1903-04 ...	4,419,302	27,287,538	979,629	81,508	3,71,876	103,617
Total for 1902-03 ...	3,066,703	39,332,253	977,204	77,226	3,58,947	89,895

101. The following statement compares the revenue and expenditure of the year with those of the previous year :— Financial Results.

Year.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1903-04	16,51,077	9,55,918	6,95,159
1902-03	15,91,665	11,40,987	4,50,678
1897-98 to 1901-02 average	12,95,918	8,86,611	4,09,307

The year of report shows better results, the receipts being higher and the expenditure lower than 1902-03.

ARBORICULTURE.

102. This subject will be dealt with in the report next year.

31. Mines and Quarries.

103. Small quantities of gold are obtained from gold washings in the streams in Ambála, Jhelum, Miánwáli and Jhelum Districts. The total quantity produced was under 110 ounces. Gold.

104. Two tons of iron were produced in the Simla District. Iron.

105. One thousand seven hundred and ninety-three gallons of petroleum were obtained from the Ráwalpindi and Miánwáli Districts, and sent to Ráwalpindi where it is utilized. Petroleum.

Coal.

106. At the Dandot Colliery in the Jhelum District, which is worked by the North-Western Railway, 43,714 tons of coal were produced as compared with 55,373 tons of coal last year. The colliery showed a loss on the year's working of Rs. 43,708, but the gross profit since the commencement of the operations to December 1903 amounted to Rs. 10,30,123. The working of the colliery has been hampered by water and by the soft nature of the floor and roof which renders drainage difficult. The scarcity of labour has also become more and more pronounced as the mines get further from the daylight. The number of persons employed at the Dandot collieries is 1,403, of whom 934 work under ground and 469 above ground. Females are not employed underground in these mines.

Salt.

107. There are four salt mines in the Punjab which come within the scope of the Mining Act, VIII of 1901, and which give employment to 1,311 persons, 1,189 below ground and 122 above ground. The output from these mines during the year was 90,667 tons, and the quantity of the salt worked was good.

Slate.

108. There are two slate quarries, one at Kanihára in the Kángra District and the other in the Gurgaon District. The Kángra mine gives employment to 200 persons, of whom 150 work below ground. The Gurgaon quarry employs 48 persons ; 12 below ground. 4,000 tons of slate were obtained from these quarries.

Mining lease.

109. A thirty years' mining lease for stibnite and galena, commencing from 1st June 1903, has recently been sanctioned in the Kángra District.

32. Manufactures.

Large Industries.

110. There are numerous cotton-ginning and pressing factories in the cotton growing districts. The largest of these is at Hissar. The number of cotton-spinning mills has increased from 5 to 9. There are 11 large woollen weaving establishments, not classed as mills, besides the woollen mill at Dháriwál and cloth factory at Delhi. The most important of these are the large carpet manufactories at Amritsar and Ambála. The number of flour mills has increased by three. Iron and brass foundry works are not very important. There are five; three at Delhi and one each at Lahore and Siálkot. The indigo factories formerly existing appear to have ceased working. Carriage building, tent making, the manufacture of furniture, and soap and oil works, are to be found in one or more districts. There is a distillery where spirit is manufactured in the European method at Amritsar and a sugar factory at Sujánpur.

Factories and the Factory Act.

Number of factories.

111. The report on the working of the Factories Act for 1903 shows an increase during the year of 22 from 166 to 188 in the total number of factories, worked wholly or partly by steam power. This increase occurred in the private factories, *viz.*, in the cotton-ginning and spinning factories, and in ice, soap and flour mills.

Inspections and general remarks.

112. Of the factories which were working during the year all but 7 were inspected. The provisions of the Factory Act in respect of a weekly holiday to the operatives are generally observed. The sanitary arrangements and conditions of the factories in the Province are reported to be good, and the requirements of the Inspectors in this respect are enforced by the District Magistrates. The health of the operatives, notwithstanding the plague, is reported to have been very good in all the factories throughout the Province. In regard to the employment of women and children there has been some disposition to evade the provisions of the law, and it has been necessary to institute prosecutions in some cases.

Accidents.

113. There were 156 accidents during the year. There has been slight increase in fatal and serious accidents and a decrease in minor ones.

33. Trade.

Total Trade of the year.

114. The trade returns are prepared for the financial year beginning with April 1st. A review of these returns for the triennium 1901-02 to 1903-04 shows, as is only natural, that the agricultural conditions within the Province are reflected in the figures for the exchange of commodities. A bumper spring harvest in 1901 was succeeded by a nearly normal year in 1902, while the past year has been above normal in its outturn. In correspondence with these conditions the trade returns show that the middle year of the triennium has noticeably lower figures for exports than either of the other two years. On the other hand, the larger surplus for exports in 1901 brought money into the country which was at once followed by an increased demand for imports in the following year, and accordingly we find that the imports of 1902 are larger than in either of the other years. During the three years in question the figures for imports are fortunately not noticeably swollen by large imports of food-grains introduced to supplement scanty harvests. As already remarked, the crops were over the normal rather than below it. The following figures exhibit the total trade above referred to exclusive of animals and treasure :—

Year.	Imports.		Exports.	
	Maunds.	Value in rupees.	Maunds	Value in rupees.
1901-02	20,305,134	15,48,03,623	38 387,408	15,51 90,401
1902-03	25,278,300	15,55,41,800	26,294,933	11,89,93,028
1903-04	21,934,932	15,09,47,156	36,105,550	14,66,66,094

River-borne Trade.

115. The river-borne trade is of little importance. The bulk of exports by this method of transport naturally far exceeds that of imports. The latter is a comparatively insignificant item, and its variations are but slight during the past six years. Exports have continually declined during the triennium. The figures for the year under report are maunds 1,184,422, value Rs. 34,45,575. The increased utilisation of railway facilities sufficiently accounts for the continued decline, which can hardly be expected to be arrested.

Imports.

116. The trade in cotton and woollen goods of European manufacture was affected abnormally on the side of increased imports by the Coronation Darbár in January 1903. Moreover, the Delhi City Railway Returns for some months before and after the Darbár were not reliable, so that the detailed figures for these articles cannot be usefully examined. Cotton piece-goods of Indian manufacture as well as those imported from Europe have, however, on the whole fluctuated little, and the trade has been well maintained. Metals and kerosine oil have been increasingly imported during the triennium, and of other articles with which the country cannot supply itself, we find that steal rails and fish-plates and railway materials generally have been largely and increasingly imported. *Ghi* shows a decline from 17¾ lakhs imported in 1901-02 to nearly 9⅘ lakhs in 1902-03 and 6 lakhs of rupees worth less than in 1903-04. This is probably due to slackness in the Kashmir traffic due to good harvests in the Punjab and perhaps also in some measure to the general disorganisation of trade with that country owing to plague. The sugar trade requires some notice. In the three years ending April 1902, imports fluctuated between 144 and 164 lakhs of rupees. During the last three years 2⅓ crores worth were imported in 1901-02, 1⅘ crores worth in 1902-03 and 2 crores worth in 1903-04. It thus appears that 1901-02 was a year of abnormally heavy imports, to be accounted for by the anticipation of the heavy countervailing duties imposed in 1902 to check the importation of bounty-fed sugars into India. In spite of the continuance of these duties up to August 31st, 1903, and subsequent orders of the Government of India directed against products of the bounty system, the import of sugar has been maintained at a high figure,

and the inference would seem to be that the demand is a large one and must be met by an adequate supply. Home sugar has been exported to a greater extent than in either of the two preceding years. The timber trade on the whole shows no signs of decline. Dried fruits and nuts experienced a better year in 1903-04 than in 1902 03 as did most other articles, including dyes and tans, gunny bags and cloth, spices, wrought leather and foreign raw silk.

Export Trade.

117. The list of exported articles which requires notice is not a long one. The value of raw cotton exported shows a very satisfactory continued rise from 127 lakhs in 1901-02 to 129 lakhs in 1902-03 and 255 lakhs in 1903 04. Hides and skins after declining from 53 lakhs of rupees worth in 1901-02 to 45 lakhs worth in 1902-03 have again risen to 63 lakhs worth during the past year. The returns for exports of rape and mustard seed in 1901-02 are abnormally high, owing to a remarkably good crop in the rabi of 1900, which caused 2½ crores worth to be exported in 1901-02, while in the two succeeding years the value was only 9¾ and 8½ lakhs respectively. Other oil-seeds were also more largely exported in 1901-02, but not to such a disproportionate extent. The exports of raw wool have risen. The export of metals has risen by over 2 lakhs of rupees, while liquors have declined from the figures of 1901-02 and 1902-03, both of which years were probably affected by the Coronation Darbár demands.

Distribution of Trade.

118. Karáchi continues gradually to increase her share of the total import trade of the Province. This now amounts to 37 per cent. of the total imports. *Pari passu* with the increase of Karáchi the percentage of imports received from the United Provinces has fluctuated in the direction of decline. The advance of Karáchi is still more noticeable under exports, of which this port monopolises no less than 54 per cent., to which figure it has risen from 38 per cent. in 1902-03 and 39 per cent. in 1901-02. The Chenab Colony exports are mainly responsible for having brought Karáchi to the prominent position which the latest figures indicate. The North-Western Railway has also considerably increased the facilities for dealing with the port.

Trade with Trans-Frontier Countries.

Afghanistan Trade.

119. Since the separation from the Punjab of the North-West Frontier Province the external trade of the Punjab is now almost confined to interchange of commodities with Kashmír proper and Ladák. The recorded trade with Afghánistán amounts to only three-fourths of a lakh, and the actual bulk is smaller, as the figures include a certain proportion of Balúchistán trade. The imports from Afghánistán appear to have been almost stationary during the last three years, while the exports from the Punjab show a tendency to increase.

Chinese Tibet Trade.

120. Trade with Chinese Tibet with the exception of a sudden rise in exports to that country last year shows no signs of improvement. This rise in exports which is spread over a wide variety of articles, including silver, brass and iron, tea, raw wool, silk, precious stones, and gum, may be due to a recent improvement of a section of the Hindústán-Tibet Road, but the total value of the export trade is still under a lakh of rupees.

Ladak Trade.

121. Ladák trade exhibited a distinct improvement during the last three years. The value of the exports from the Punjab to Ladák is recorded as 3⅓ lakhs, of which 2 lakhs are accounted for in European piece-goods. The demand in Ladák for cotton of Indian manufacture is insignificant. Raw wool and charas continue to be principal articles of import from Ladák to the Punjab. The steady import of charas was probably meant to anticipate the enhancement of charas duty introduced on 1st April 1904.

Kashmir Trade.

122. The figures for the trade with Kashmír have been affected by faulty registration and by evasion of custom duties, so that it is impossible to draw any confident conclusions from them. The prevalence of plague during the last three years in the districts traversed and served by the trade has certainly had a most disorganizing effect. And a marked decrease in the export of goods from the Punjab appears to have occurred. This decrease may, however, be apparent only

and due to smuggling to evade the payment of duties levied in Kashmír on cotton piece-goods, wheat, salt and sugar. The smugglers, if this is the explanation, of course avoid the trade registration posts.

JOINT STOCK COMPANIES.

Number and capital of companies.

123. The year 1903-04 was one of considerable activity in joint stock business and closed with 57 companies divided into shares, having an average nominal capital of Rs. 3,17,350 and Rs. 1,56,387 paid up against the corresponding figures, at its opening of 49 companies with Rs. 3,29,714 nominal and Rs. 1,70,307 paid-up capital apiece.

New companies registered.

124. The new companies include a new native bank with 2 lakhs of nominal capital, one cotton-ginning and one cotton-press company, an oil and soap mills and a Native Trading Association having the partly commercial and partly patriotic object of dealing in commodities produced in India. One new company proposes to sell books relating to the Muhammadan religion and to publish periodicals, and another to manufacture the implements of sports and games. Companies do not, however, always confine their activity to the objects set forth in their Memorandum of Association, and one, whose legitimate interests were in wool and silk, decided during the year to make ice also.

Increases and reductions in capital.

125. Eight lakhs were added to the nominal and Rs. 68,000 to the paid-up capital of banks previously registered. Among manufacturing companies, the Himálaya Glass Works in European hands has doubled its nominal capital; while the Punjab Cotton Press Company has taken a similar step, with the apparent intention of extending its operations to many substances and several forms of trade not covered by the original Memorandum of Association. Large increases in paid-up capital appear in the accounts of the company last named, and also of the Amritsar Cotton Mills and the Saranand Company, Limited.

126. The only reduction was made in the capital of the North-Western Railway Co-operative Stores Association, which found itself with more than was required for carrying on its business.

Investment of capital.

127. Mills and presses, with a paid-up capital of over 45 lakhs, account for the larger half of the total paid-up capital, and cotton, wool and silk industries absorb 57 per cent. of this large fraction. Next follows beer with 18 lakhs, and next bank and insurance companies with over 16 lakhs of paid-up capital.

Liquidation and dissolution.

128. Among the companies which are undergoing and have undergone dissolution, 12 in number, manufacturing companies figure rather largely, and leaving those under European control and management out of account, it would seem that the elements of which joint stock companies are generally composed are less well fitted for dealing with manufacturing business than with banking, trading or simple operations, such as cotton pressing and ginning.

Joint stock companies at work.

129 Omitting the Ambála People's Bank, Limited, which is an abortive co-operative credit society that has failed to do any business or to prepare any balance sheet since it came into existence in February 1902, there are now seven banks registered in the Punjab. Five of these are under Native management, with a paid-up capital of over 3 lakhs. In these institutions the educated and professional man and officials, who are the commonest recruits to joint stock undertakings, appear to have blended with the hereditary business man and banker, a combination from which interesting results may be anticipated.

Fees.

130. The income from fees came to Rs. 2,475 against Rs. 1,092 last year. In one case a company failed to pay the fee prescribed for registering a particular document.

34. Public Works.

Total expenditure.

131. The total outlay of the year on Public Works in the Roads and Buildings Branch amounted to nearly 75 lakhs.

Imperial Civil Works.

132. Twelve lakhs were expended on Imperial Civil Works, the most important of which were the new Imperial Civil Secretariat at Simla and the new General Post Office at Lahore.

Provincial Civil Works.

133 The expenditure on Provincial Civil Works amounted to 23 lakhs for new works and 12¼ lakhs for repairs. There has been a large increase in expenditure in the last three years. The main works that were undertaken were the public Civil offices at Miánwáli and the Colonization Officer's Court at Sargodha; new offices for the Inspectors of Schools at Jullundur and Multán; and alterations to the Normal Schools at Ráwalpindi, Jullundur and Multán; a new Munsif's Court-house at Ferozepore and Chunián; improvements in lateral ventilation and in the construction of separate iron cubicles at the two Central Jails and ten District Jails; and finally eleven Police Stations, besides Police lines and a Hospital, and the Office of the District Superintendent of Police at Lahore, and a Thána and Treasury-room at Sargodha.

Roads.

134. The expenditure of the year on communications amounted to 13 lakhs of rupees, *viz.*, 4 lakhs on new roads and 9 lakhs on repairs. The mileage of new metalled roads sanctioned, or in hand, was 154, of which about 50 are in the Chenab Canal Colony to meet the demand of the cultivators in getting their produce to the railway for export The progress made in extending road communications in the colony has been disappointing, chiefly owing to the difficulty of getting stone carried. Carts were scarce and were in great demand by the cultivators, and in the spring labour became exceedingly scarce owing to the plague. The question whether it will not pay to develop the Canal Colony by railways rather than by roads is receiving attention. In the adjacent colony on the Jhelum Canal a metalled road was made to connect the new head-quarter station at Sargodha with Shahpur, a distance of 20 miles.

Colony towns.

135. The work of the Public Works Department in the colonies is not by any means confined to canals, roads and railways. No expense is being spared to develop the colony towns on sound and healthy lines. Not only have the general plan of the towns and the alignment of roads and the sites of buildings been arranged for by Government, but a good deal of money has also been spent on new shops, new roads and new markets for these towns. Drainage systems have been provided, wells sunk, and a water-supply secured. In the Jhelum Colony estimates for water-works and for a street drainage system at Sargodha aggregating two lakhs were prepared, and work on both is now in hand. At Lyallpur the new street drainage system worked well, and a small sewage farm was started by the Colonization Officer. At Gojra and Toba Tek Singh similar drainage schemes were in hand and about half finished. The drainage of Chiniot Road Town was completed, and a project for that of Sángla accepted, but not actually begun.

The Hindustan-Tibet trade route.

136. The Hindustan-Tibet Road is being improved for 33 miles, as far as Namgia, into a four-foot track passable for laden sheep, goats and *yáks*. Communication with the surrounding country has been improved, and if the whole road between Chini and the Frontier, a length of nearly 60 miles, is put in order, Central Asian traffic may be drawn to this route instead of going round by Spiti and Kashmír.

Requirements of Province as regards roads.

137. The requirements of the Province as regards feeder roads to the railways from the areas irrigated by the large canal areas are being carefully considered. At present, excluding Municipal and purely local roads, there are less than 2,000 miles of road in the whole Province, and of these more than half run parallel to trunk lines of railway.

Boat bridges.

138. Major boat bridges were maintained on all important through lines of communication, and the usual steam ferry was worked over the Indus at Dera Gházi Khan under the management of the North-Western Railway. The total expenditure under this head was Rs. 68,298 and the receipts Rs 73,086.

Famine Relief Works.

139. There was no necessity to undertake any relief works during the year, but a good deal of work was done on famine projects. The programme for the insecure districts of the South-East Punjab has been brought up to date, and estimates have been compiled which will provide work for nearly 300,000 labourers for six months.

Dera Ghazi Khan protective works.

140. The Dera Gházi Khan protective works survived another flood season, notwithstanding that the attack on the head of the stone bund was unusually severe. When the floods subsided it was found that the big bay, north and east of the stone bund, had silted up. This is very satisfactory, for, although the main stream did not get turned to the western bank, the spring level in and round the town fell 3 or 4 feet, and the health of the city consequently improved very much. Two fascine groynes were constructed by the Irrigation Department,—one about two miles north of the stone bund, and the other just at its down stream end. The effect of these has been shown during the present flood season, for the main stream is now apparently going off to the left bank, and the future security of the town is much more hopeful than it has seemed for many years.

Miscellaneous Public Improvements.

141. The works classified under this head are mainly those of a local character connected with sanitary improvements in towns or with private undertakings, which for convenience are carried out by the Public Works Department. The most important of these are mentioned in the sections on Medical Relief and Sanitation in Chapter VI. Projects aggregating nearly 15 lakhs were either prepared or scrutinized by the officers of the Public Works Department for different local bodies.

Railways and Tramways.

Railway extensions in the Punjab.

142. The Kálka-Simla Railway on the 2 feet 6 inch gauge with its four important tunnels was opened for traffic during the year. The length of the line is 59·44 miles and the cost of construction 141 lakhs. Sanction has been accorded to the construction of a line from Ludhiána to MacLeodganj in connection with the Southern Punjab Railway, a distance of 156 miles, and of a line between Sargodha in the Jhelum Colony and Shorkot Road.

Traffic.

143. The year was marked by a large increase in the earnings of the railways both in passenger and goods traffic. The income of the North-Western State Railway exceeded that of the previous year by as much as 13 lakhs under the former head, and by over 55 lakhs in goods traffic. These satisfactory results are attributed to the return of the country to prosperous times and to the great "Kumbh" festival which was held at Hardwár after an interval of 12 years. A serious railway accident resulting in the death of 11 passengers and in the injury of 7, occurred in June 1903 at Sukheke, a station in the Gujránwála District between Wazírabád and Lyallpur.

No Tramways or Provincial Railways.

144. There are no public tramways in the Punjab, and no railways under provincial control.

35. Irrigation.

General progress of Canals.

145. The Indus Inundation Canal system which was formerly classed as a minor work has been transferred to the head of Major Works. There are now eight canal systems classed as Productive Major Works. These are the Western Jumna, the Bari Doab, the Sirhind, the Chenab, the Jhelum, the Upper Sutlej, the Sidhnai and the Indus Canals. Expenditure on capital account was incurred on all these canals except the Sidhnai; but the only important extensions at present in progress are on the Jhelum Canal on which 18 lakhs were expended during the year and the Chenab Canal on which the capital outlay was increased by Rs. 4,61,000. The total area irrigated by all the canals—Imperial, Provincial and Native States—during the year was 6,390,334 acres compared with 5,668,786 acres. Matters of interest relating to the different canals are related below:—

Western Jumna.

146. The rainfall in the Western Jumna area, though generally below the average, was favourable both for kharif and rabi sowings, the winter rain was deficient and the demand for canal water continued until the heavy rain in March made it no longer necessary. The supply in the river was meagre and the demand could not be fully met. The total area irrigated was 663,792 acres, which though above the average is far short of the maximum possible, *viz.*, 809,000 acres. The net income of the year amounted to Rs. 15,04,919, amounting to 8·71 per cent. on the capital outlay.

Bari Doab.

147. The total irrigated area on the Bari Doab this year is the highest on record. The year was one of very good rainfall which assisted greatly in the maturing of the crops. Heavy floods, however, occurred and did some damage both to the crops and to the canal banks. The total area irrigated was 936,687 acres compared with an average of 870,401. The net income of the year amounted to Rs. 24,97,772, which gives a return of 12·68 per cent. on the capital outlay.

Sirhind Canal.

148. The tract of country supplied by the Sirhind Canal is one in which the annual rainfall barely exceeds 18 inches anywhere and which in the Ferozepore District does not exceed 13 inches. During the year even these figures were not reached, although the winter rains were slightly above the average. There was moreover a short supply in the river in November which necessitated the rotational system of working the branches of the canal being put in force for the remainder of the year. No extensions were made to the canal during the year. That the area irrigated was not up to the average cannot therefore cause any surprise. The total area irrigated by this canal was 1,040,829 acres in British and Native State Branches together, compared with an average of 1,048,271. The profits earned on the British Branches amounted to Rs. 1,835,331, equivalent to 7·40 per cent. on the capital invested.

Chenab Canal.

149. The expenditure incurred during the year and charged to the capital account of the Chenab Canal amounted to Rs. 4,61,404. Two distributaries from the Gugera Branch Upper were completed, and two distributaries with their minors from the Jhang Branch Lower. The rainfall in January and March, which occurred in this canal area, helped materially to mature the very large rabi crop. A large increase in irrigation, bringing the total irrigated area of the year up to 1,982,714 is due to the extension of cultivation on the distributaries above mentioned.

Jhelum Canal.

150. The capital expenditure incurred on this canal during the year amounted to Rs. 17,95,330. The Main Line, Northern and Southern Branches, and the Northern and Southern Feeders were completed during the year. The Khadir Feeder and the Chenab Escape were also completed with the exception of the works at the Budhi Nalla crossing. Considerable progress has been made towards the completion of the Major and Minor Distributary systems of the canal. The canal was closed for three weeks in January and February on account of general rain over the colony. The severity of the plague outbreak in the colony has already been mentioned in this report. The area irrigated amounted to 279,260 acres and the gross revenue was Rs. 2,23,146.

Major Inundation Canals.

151. The year was a favourable one on the three Inundation Canals which are classed as Major Works, *viz.*, the Sidhnai, the Upper Sutlej and the Indus Canals. On the Sidhnai Canal the flow continued for 274 days during the year as compared with an average of 181 days. The supply of water in the Upper Sutlej Inundation Canals and in the Indus Inundation Canals was also favourable and good results were obtained. The Indus river rose in time, maintained a steady high level and subsided seasonably. There were no disturbing floods and rainfall helped the canal supplies at times when it was most needed.

Minor Irrigation Works.

152. The Minor Irrigation Works under the control of the Irrigation Department comprise the Inundation Canals of the Lower Sutlej, the Chenab, Shahpur, Jalalpur, Muzaffargarh, Ghaggar, the Ravi and the Rangoi Inundation Canals. The Ravi Inundation Canals, which were formerly managed by the District Board of Montgomery, were transferred to the Irrigation Branch in October 1903. The year was a favourable one for all these canals. The breach of an embankment on the Chenab caused an inundation on the Muzaffargarh Canals which destroyed a large area of the kharif crop.

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications:—

(*a*)—DEPARTMENTAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1902 to 30th September 1903.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the year 1903-04.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1903-04.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1903-04.

Stamps.—Note on the Stamp Statements of the Punjab for the year 1903-04.

Income Tax.—Punjab Income Tax Report for 1903-04.

Forests.—Progress Report on Forest Administration in the Punjab for 1903-04.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1903-04.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1903-04.

(*b*)—FINANCIAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, ELEVENTH ISSUE.

Salt—Tables III 11 and 12.

Excise—Table V 12.

Stamps—Tables VII 22 to 24.

Income Tax—Tables VIII 2, 3, 8 and 9.

36. Gross Revenue and Expenditure.

General.

153. The balance sheet of the year works out as follows:—

The income and expenditure of the Railways, Post Office, Telegraph and Salt Departments are excluded from the account, and Military expenditure and Capital expenditure on canals are also omitted from the calculation.

Details of revenue.

154. The revenue raised in the Province during 1903-04 is made up as follows, previous year's figures being quoted for comparison:—

SOURCE OF REVENUE.	1902-03.	1903-04.
	Lakhs of rupees.	
Land Revenue	230·55	251·42
Irrigation (excluding land revenue due to canals)	159·15	175·26
Salt	67·02	57·04
Local Rates	40·61	44·75
Stamps	39·50	40·48
Excise and Opium	27·48	28·74
Income Tax	14·58	11·70
Forests	15·86	17·18
Police	7·01	7·05
Civil Works	7·14	7·16
Interest	2·49	3·46
Law and Justice	2·97	3·18
Tribute	3·07	2·92
Jails	1·88	1·58
All other items	12·60	13·84
TOTAL RECEIPTS	631·91	665·76

The year was one of steady increase all round, except under the head of Assessed Taxes, which lost 2·88 lakhs as the result of the measures recently taken to raise the minimum limit, and of Salt, the revenue from which fell in consequence of the reduction in duty. The total rise in receipts came to 33·85 lakhs.

Expenditure.

155. The expenditure, excluding expenditure of the Military, Railways, Post Office (Imperial) and Telegraph Departments, Municipal expenditure and Capital expenditure on canals, amounted to 365·37 lakhs in 1903-04. The detailed items, with corresponding figures for the previous year, are given below :—

Departments.	1902-03.	1903-04.
	Lakhs of rupees.	
Irrigation	62·64	62·76
Public Works	57·54	64·37
Land Revenue	38·65	41·41
Police	37·72	37·56
Law and Justice	33·15	33·62
Medical	17·88	14·97
Education	15·62	17·29
General Administration	13·54	12·69
Superannuation Allowances and Pensions	12·77	13·36
Jails	10·25	9·76
Forests	9·60	11·56
Political	7·10	7·64
Stationery and Printing	4·79	5·28
Salt	3·66	4·23
All other items	24·63	28·87
Total Expenditure	349·54	365·37

It is satisfactory to note that, while the cost of the General Administration, of the Maintenance of the Peace and the Administration of Justice has rather decreased than increased, it has been possible to make considerable additions to the amounts expended on Public Works and Education.

156. The following is an abstract of the gross income and expenditure for 1903-04 as recorded in the books of the Accountant-General, Punjab:— Abstract of Income and Expenditure.

	Receipts.				Expenditure.			
	Imperial.	Provincial.	Local.	Total.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue and Expenditure.	1,73,77,210	2,22,34,835	47,39,942	4,43,51,987	25,92,550	2,22,95,967	38,40,257	2,87,28,774
Contributions...	...	7,52,213	16,200	7,68,413	...	16,200	7,52,213	7,68,413
Debt and remittance heads.	...	...	...	25,45,20,408	...	...	...	27,43,73,358
Total ...	1,73,77,210	2,29,87,048	47,56,142	29,96,40,808	25,92,550	2,23,12,167	45,92,470	30,38,70,545
Opening balance	...	...	...	1,06,13,966	Closing balance		...	63,84,229
	1,73,77,210	2,29,87,048	47,56,142	31,02,54,774	25,92,550	2,23,12,167	45,92,470	31,02,54,774

37. Land Revenue.

157. The Land Revenue Collections for the year ending 30th September 1903 have been reviewed in Chapter II, and though the land revenue and the financal year do not entirely correspond, the reasons already given for an increase of income under this head hold good. The receipts for the financial year rose by over 21 lakhs. Increase of Land Revenue.

38. Irrigation.

158. The Capital Expenditure to the end of 1903-04 on all canals in operation, for which a Capital Account is kept, inclusive of Contributions towards the Western Jumna, Sirhind and Ghaggar Canals, amounts to just under 1,230 lakhs, of which just over 27 lakhs was spent during the year. Of this over 18 lakhs went into the Jhelum and about 4½ into the Chenab Canal. The Indus Inundation Canals also received attention to the extent of over a lakh. Capital Expenditure.

159. The income realised during the year came to nearly 201 lakhs, whilst the expenditure, other than Capital and Interest, amounted to about 66⅕ lakhs, thus leaving a profit balance of about 135 lakhs, which represents approximately 12½ per cent. on the total Capital outlay. If Interest charges, amounting to some 40⅔ lakhs, be included in the calculation, the profit balance comes to 95 lakhs, and the percentage to 8·81. The condition of the Irrigation Department generally has been discussed already in Chapter IV. Income and Expenditure.

39. Opium and Excise Revenue.

General.

160. There has been a further increase in the receipts from all classes of excisable commodities dealt with in the report, except opium, and in this latter case a fall of Rs. 18,000 in receipts veils a perceptible, though slight, increase in consumption. It cannot but be expected that with a rise in the standard of material comfort in the Province the consumption of liquor and drugs will gradually increase, and the present degree of indulgence, when averaged per head of population, does not reveal the existence of intemperate habits. There is, however, still too much illicit distillation in the Sikh districts, and to combat this evil retail vend licenses are being issued experimentally at moderate fixed fees in the rural areas of Amritsar, Jullundur, Ferozepore and Ludhiána. The only other item of interest in the year's work has been the raising of the duty on charas from Rs. 2 to Rs. 6 a sér, and the effect of this is being narrowly watched. The proposal to establish a warehouse for charas at Leh in concert with the Kashmir Darbár has been advanced. The trade in bhang calls for no special remarks, and the question of the imposition of a quantitative duty on opium is still under discussion.

40. Salt Revenue.

Effect of the reduction of salt duty.

161. The duty on salt was reduced with effect from the 18th March 1903: in the case of salt obtained from the mines in the Mandi State from 7 annas 6 pies to 6 annas a British maund, and in the case of other salt from 2 rupees 8 annas to 2 rupees a British maund. This reduction has therefore been in operation during the year, and its effect on the revenues and on the price and consumption of salt can now be estimated. As regards the revenue, there has been a decrease amounting to 10 lakhs, and seeing that at the same time there has been an increase of sales, especially of the better class of rock salt obtainable in the Punjab mines, there can be no doubt that the decrease in revenue is the immediate result of the reduction in duty. It appears, moreover, that the price of the salt has responded to the reduction in the duty. The Commissioner, Northern India Salt Revenue, reports that in the case of the Kohát and Mandi salt the reduction in price was small, but in the Punjab, the United Provinces and Rájpútána prices, both wholesale and retail, show that consumers have received practically the full benefit of the reduction of duty.

Cis-Indus and Kalabagh Salt Mines.

162. Two million six hundred and sixty-two thousand seven hundred and eighty maunds of salt were sold from the cis-Indus and Kálabágh Mines compared with 2,556,951 maunds sold last year. An outbreak of plague which commenced at Khewra on the 5th March 1904 interfered seriously with work at the depôt. The balances of salt uncleared at the close of the year was therefore large. The decrease in the Punjab salt revenues of the year is almost entirely accounted for in the cis-Indus and Kálabágh Mines, the total proceeds from these mines amounting to Rs. 55,25,000 compared with Rs. 65,13,000 last year.

Mandi Mines.

163. The reduction in the salt duty has not yet produced any marked effect upon the trade in Mandi salt. The sales during the year amounted to 126,555 maunds compared with 129,862 maunds in 1902-03. It is considered probable that the reduction in duty will enable cis-Indus rock salt to push back the Mandi salt.

Sultanpur Salt Works.

164. A small but satisfactory improvement in the trade in Sultánpuri salt occurred during the year, and the sales rose from 59,353 maunds to 72,946 maunds.

41. Stamp Revenue.

165. The present is not a year of a triennial report. The annual statements, however, show a rise of nearly a lakh in the gross receipts; this is divided in fairly even proportions between the Stamp Act and the Court Fees Act. It apparently indicates a continuation of the process of recovery from the temporary effects of the Punjab Alienation of Land Act. The only other noteworthy matter is the increase from Rs. 1,48,310 to Rs. 1,59,616 on account of one-anna receipt stamps. This branch of revenue is steadily developing and there is undoubtedly a growing acquaintance with the law on the subject. **Receipts.**

42. Assessed Taxes.

166. This is not a triennial report year for Assessed Taxes, but the subject presents special features, in that it is the first year in which, in accordance with the provisions of Act XI of 1903, the minimum taxable limit has been Rs. 1,000 instead of Rs. 500. This has caused a fall in receipts of nearly 3 lakhs, but this was only expected, as last year the two lowest classes of assessees, now exempt, paid nearly 3½ lakhs. The possibility of reducing Income Tax establishments is now under discussion. **Receipts.**

43. Forest Revenue.

[Forest revenue and expenditure have already been noticed in Chapter IV].

44. Provincial Revenues.

167. The income and expenditure under the Provincial section of accounts during the past three years have been as follows:— **Income and Expenditure.**

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1901-02	*Nil.*	2,22,50,328	2,07,53,978	14,96,350
1902-03	14,96,350	2,25,09,616	2,14,80,846	25,25,120
1903-04	25,25,120	2,29,87,048	2,23,12,168	32,00,000

The figures for 1903-04 are not final, but are liable to correction in next year's Administration Report. The balance of Rs. 25,25,120 at the end of 1902-03 includes a special grant of 10 lakhs made by the Government of India for outlay on special works in the following year. A balance of 32 lakhs at the end of 1903-04 is guaranteed by the Government of India, and includes 20 lakhs for the extension and improvement of Simla and 2 lakhs for works of public utility in the year 1904-05. The revenue classed as Provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial Rates, have been discussed above. Provincial Rates on land include the rate levied under the District Boards Act, 1883, which is noticed in the following section, and the Patwári Cess, the expenditure of which is shown under Land Revenue (Local). The greater portion of the expenditure excluding Irrigation expenditure, shown in the table in paragraph 155, is Provincial. The wholly Imperial heads of expenditure are Assignments, Political, Political Pensions, Ecclesiastical and Salt. The Provincial settlement, which was entered into in March 1897, for the reasons stated in last year's report, continues till 31st March 1905, when a permanent settlement will be made.

45. Local Funds.

168. The system of a peripatetic audit of the accounts of District Boards has been introduced. **Audit.**

Balances.

169. The closing balances at the credit of the different District Boards on the 31st March 1904 aggregated Rs. 10,75,000 against Rs. 9,80,000 at the end of the previous year, showing an improvement of Rs. 95,000. Siálkot was the only District Board which overdrew its balance. It started with an opening balance, which owing to suspensions and remissions of revenue, in the previous year, had already fallen below the prescribed minimum, and the income in 1903-04 suffered a further loss of Rs. 13,000 as compared with the estimates, mainly owing to the suspension of the cattle fair at Gulu Shah, a measure which became necessary in consequence of an outbreak of cholera. The account of this Board was adjusted by a contribution from the Provincial Government subject to repayment hereafter. The balances of the Hissar, Ambála, Jullundur and Multán District Boards fell below the prescribed minimum.

Income.

170. Eliminating Debt Head transactions, the income of the year amounted to Rs. 31,68,000, compared with Rs. 29,82,000 last year, and the expenditure to Rs. 30,89,000 compared with Rs. 28,29,000. The only important increase in the income was under the heading of Provincial Rates. The increase under this head amounted to Rs. 2,25,000, and, as in the case of Land Revenue receipts, it was due to the favourable agricultural conditions, which resulted in the realization of a great part of the revenue suspended in previous years as well as of the current demand.

Expenditure.

171. The net increase in expenditure amounted to Rs. 2,60,000, which occurred mainly under Contributions (Rs. 2,28,000) and Civil Works (Rs. 1,04,000), partly counterbalanced by reduced expenditure under Medical (Rs. 67,000).

Contributions.

172. This is the adjusting head through which payments made by the Provincial Government to District Boards and *vice versâ* are adjusted. Compared with the previous year, there is a decrease of Rs. 33,000 on the receipt side, which is due mainly to certain special contributions having been made in the previous year for Primary School buildings. On the expenditure side there is an increase of Rs. 2,28,000, which is due mainly to the favourable financial condition of the Boards having enabled them to repay to the Provincial Government contributions which had become due in previous years, but which had been suspended.

Civil Works.

173. The expenditure aggregated Rs. 9,04,000 against Rs. 8,01,000, an increase of about one lakh of rupees. About three-fourths of this increased expenditure was incurred on Communications. The Jullundur District Board spent Rs. 36,000 on this object, and in Gurgaon a new metalled road was constructed by the District Board at a cost of Rs 17,000. The Ferozepore District Board spent Rs. 15,000 on the construction of new and the improvement of old rest-houses in the district. In Gujránwála a school with a boarding-house was constructed at a cost of Rs. 8,000.

Medical Charges.

174. The expenditure incurred by District Boards in connection with plague was Rs. 26,000 compared with Rs. 92,000 last year, which fact accounts for the reduction in the expenditure under the head ' Medical.'

46. Municipal Funds.

Audit.

175. The peripatetic audit system which has been introduced for the purposes of auditing Local Fund accounts has also been extended to Municipalities.

Balances.

176. The several Municipalities and Notified Areas opened the year with balances aggregating Rs. 17,98,000, made up as follows:—Rs. 14,83,000 in cash and Rs. 3,15,000 in investments. The aggregate closing balance was Rs. 19,48,000 (Rs. 16,10,000 in cash and Rs. 3,38,000 in investments).

177. The balance of loans outstanding on the 31st March 1904 aggregated Rs. 49,23,000 against Rs. 44,53,000 on the 31st March 1903. The increase of Rs. 4,70,000 represents the difference between the advances (Rs. 6,58,000) taken up during the year by certain Municipal Committees against sanctioned loans, and the recoveries (Rs. 1,88,000) made in repayment of loans advanced in previous years. The loans which were taken up during the year were Ambála Rs. 9,400; Simla Rs. 38,800; Dharmsála Rs. 3,400; Lahore Rs. 40,000; Amritsar Rs. 5,66,600. The large loan in Amritsar was required for the purpose of the new water-works which have been under construction. With the exception of a loan obtained by the Lahore Municipality from the Bank of Bengal and a small loan raised on debentures by the Simla Municipality these Municipal loans have all been obtained from Government. **Loans.**

178. The total income and expenditure, exclusive of Debt Head transactions, amounted to Rs. 49,33,000 and Rs. 52,55,000 against Rs. 49,39,000 and Rs. 51,92,000 respectively in the preceding year. The income was thus practically the same as in the previous year, and the expenditure about Rs. 60,000 more. **Income and Expenditure.**

179. The revenue of Municipalities is roughly divided into three main classes,—(1) Realizations under Special Acts, (2) Revenue derived from Municipal property and powers apart from taxation, (3) Taxation. The subject of Municipal Taxation has been dealt with in Chapter III. **Sources of Revenue.**

180. The chief sources of income under Special Acts are from cattle-pounds, Hackney carriage licenses and Chaukídári Tax. There was a decrease under Hackney carriages, as the receipts of the previous year during the Delhi Darbár were abnormally high. The total income under this heading amounted to Rs. 35,000. **Income raised under Special Acts.**

181. Municipal property yielded a total revenue of Rs. 7,47,000 compared with Rs. 9,26,000. There is here therefore a very substantial falling off in income of Rs. 1,79,000. Here again the income last year had been exceptionally increased by certain sales of Municipal land as mentioned in paragraph 382 of the Administration Report last year, particularly by the sale of More Sarái at Delhi for Rs. 1,65,000. The other items of income under this head have not varied very much, and do not require notice. **Income raised from Municipal properties.**

182. The total grants and contributions received by Municipalities from Government, Local Funds and other sources amounted to about 3 lakhs, about nine-tenths of the whole being devoted to Educational and Medical purposes. **Grants and Contributions.**

183. The total revenue from Miscellaneous Income was Rs. 3,98,000 against Rs. 3,94,000. Nazúl income fell from Rs. 73,000 to Rs. 48,000, as the receipts for 1902-03 were exceptionally large at Delhi. Sales of water fetched Rs. 9,000 more, compared with the preceding year. An increased income from this source was derived in Simla, Delhi and Ambála, but not in Lahore, where there was a decrease of Rs. 2,000 said to be due to the non-recovery of rates from those who fled from their houses on acccunt of plague. **Miscellaneous Income.**

184. The total expenditure of Municipalities amounted to Rs. 52,55,000, an increase of Rs. 63,000 over the expenditure last year. There is little of interest in the variation of expenditure on the cost of the General Administration of the Committees and of the Collection charges. Under the head of Public Safety the expenditure amounted to Rs. 7,14,000 against Rs. 7,15,000 in the previous year. The expenditure on Protection against fire was reduced in Simla, Amritsar and Batála; and the expenditure on Lighting in Delhi was reduced by Rs. 4,000 as the charges of the previous year had been increased by the installation for electric lighting. The construction of Police buildings in the towns of Lahore, Amritsar, Fázilka and Multán raised the cost of the Police charges incurred by Municipalities by Rs. 6,000. **Expenditure.**

Expenditure on Public Health and Convenience.

185. The principal variation in Municipal expenditure occurred under the head of Public Health and Convenience. The total expenditure amounted to Rs. 27,90,000 and is not very different from last year, being only Rs. 54,000 in excess of last year's figure. But the locality of the heavy expenditure on such objects as drainage and water-works has shifted. Last year the expenditure on Drainage in Delhi, Ambála, Simla, Lyallpur and Chunián was heavy, and the total charges under this head have decreased by Rs. 1,46,000. On the other hand, there is a large increase under the head of Water-supply on account of the important water-works which have been under construction at Amritsar. A considerable increase of Rs. 38,000 in the Hospital charges is accounted for by the construction of the Victoria Jubilee Hospital at Amritsar, and by large additions to the hospital at Delhi. A decrease of Rs. 56,000 under Roads is spread over several Municipalities, but the major portion of it occurred in Delhi and Amritsar, due in the case of the former to heavy expenditure in connection with the Darbár having swollen the account of the previous year, and in the latter to the stoppage of work to permit of pipe-laying in the city during the year under review.

Municipal Expenditure. Public Instruction.

186. The expenditure by Municipalities on Public Instruction amounted to Rs. 6,15,000 against Rs. 5,45,000 in the previous year. The increase of Rs. 20,000 is mainly due to the construction of a school building at Multán for Hindu girls, a boarding-house at Pind Dádan Khan, and to improvements to school buildings at Amritsar and Ludhiána, and partly to the refurnishing of certain schools.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information and statistics will be found in the following reports and publications :—

Census.—Report on the Census of the Punjab and North-West Frontier, 1903, by H. A. Rose, I. C. S.

Births and Deaths.—Sanitation.— Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board and the Report on Sanitary Works for the year 1903. Judicial and Administrative Statistics of British India, Eighth Issue, 1904, Tables XIII.

Emigration.— Census Report, *as above*, and Financial and Commercial Statistics of British India, Table XXXV.

Medical Relief.— Notes on the Annual Statements of the Dispensaries and Charitable Institutions of the Punjab for the year ending 31st December 1903. Judicial, &c., Statistics, *as above*, Tables XIV and XV. Report of the Punjab Lunatic Asylum for the year 1903.

Vaccination.— Notes on Vaccination in the Punjab for the year 1903-04. Judicial &c., Statistics, *as above*, Tables XVI.]

47. Details of Census.

(See pages 153—160 of the Report for the year 1901-02 and the Report on the Census of the Punjab and North-West Frontier, 1902.)

48. Births and Deaths.

187. The death-rate of the Province exhibits a rise from 44·1 in 1902 to 49 per *mille* during the year under report. For this rise fevers and plague are mainly responsible, the former accounting for 1·8 and the latter for 1·7 per *mille* of the increased incidence. The birth-rate, on the other hand, in a year of normal prices has remained comparatively steady with an incidence of 42·9 per *mille* compared with 43·8 in 1902. These figures are so far satisfactory, in that in spite of fever and plague the birth-rate of the Punjab is only exceeded by the birth-rates in the United and Central Provinces, but the melancholy fact remains that the Punjab exhibits for the third year in succession the highest death-rate in India. Excluding plague, which is credited with 10·2 of the total death-rate of 49 per *mille*, the rate is still some 2 per *mille* above the quinquennial average and 10 to 11 per *mille* higher than that of healthy years. The influence of the various diseases on the vital statistics is exhibited in the mortality bill for the Province, which is as follows :— General.

	Deaths per mille.
Cholera	·7
Small-pox	·8
Plague	10·2
Fevers	25·3
Dysentery and Diarrhœa	·8
Respiratory diseases	3·4
Injuries	·3
All other causes	7·4

The cholera outbreak was confined mainly to four districts, and was directly traceable to the Kumbh Fair at Hardwár in April 1903. Compared with previous Kumbh Mela years, the mortality was small, and the spread of the disease was checked by prompt and effective measures in its incipient stages. Small-pox was also rather more active, and this was probably due to plague interfering

with vaccination operations. The deaths from dysentery and diarrhœa, respiratory diseases and all other causes call for no special remark.

Plague.

188. The spread of plague in the Province is the most disquieting feature of the year, and the most disappointing; and after six years of fruitless but unceasing toil the attempt to enforce compulsory measures for the control of the disease has had to be given up. The havoc played by the malady in some of the most fertile districts has been terrible, and it seems only too probable that the end is not yet. The year showed a mortality bill of 210,697, whilst 341,267 persons were attacked by the disease. Gujránwála, with a population of 890,577 persons, lost 44,267 or 63 per *mille*, whilst 7·62 per cent. of its inhabitants were attacked. Jullundur, Lahore and Amritsar all lost over 23,000, and their ratios of attack and mortality were, respectively, 4·67, 4·45 and 3·66 per cent. and 28·6, 20·7 and 25·6 per *mille*, and other districts, such as Hoshiárpur and Siálkot, were badly hit. All that could be done was done. Three hundred and twenty-seven thousands three hundred and fifty-seven inoculations were performed, and though this carried no immunity from the disease, still the statistics show that the liability of the uninoculated to death was two and-a-half times as great as that of the inoculated. Now that the disease has got beyond control, a new scheme of policy has been announced. The element of compulsion has been almost entirely eliminated, and while Government have recognised and provided for the obligation of rendering assistance to the inhabitants of plague-stricken towns and villages, and have left no stone unturned to persuade and educate the people in the matter, the choice of adopting or neglecting precautionary measures has been left almost entirely unfettered. One duty alone is still entirely compulsory, namely, the reporting of plague occurrences, but while in the case of villages it was formerly the duty of the Patwáris to maintain registers and to submit returns of plague occurrences, these latter are now reported by chaukídárs at the same time and in the same way as deaths from other diseases. In villages, too, compulsion may still be applied to an inconspicuous minority who refuse to leave their houses when the remainder of their fellow villagers desire evacuation. In towns compulsory action is confined to the isolation of houseless or unattended persons suffering from plague. Again, while chemical disinfection by official agency is still advocated, rules have been framed to ensure its effectiveness. The people, that is, can have it or not as they like, but if they have it, they must submit to it thoroughly. Finally, where disinfection is not desired desiccation is advocated, and inoculation is freely offered at every dispensary in which there is an Assistant Surgeon in charge. The administration of plague measures has also been assimilated to that of other diseases, and the Civil Surgeon of each infected district is now his own Plague Medical Officer. Plague charges have also been re-arranged, and Local, that is, District, Funds have been freed from the liability for all expenses except those in connection with local precautionary measures and disinfection. It is too early as yet to comment on the working of the new policy. All that can be said is that, while apathy is still the prevailing note, there are occasional indications that the attitude of the people towards the disease is undergoing some slight change.

Fevers.

189 The prevalence of fevers in the Province has long been a source of regret, and though the present year is characterised by a rising death-rate, this is only slightly in excess of the quinquennial average, and far below that of 1900. The most noticeable increases were found in the districts of Amritsar, Gurdáspur, Shahpur, Multán and Muzaffargarh, and are ascribed to abnormal monsoon rains and inundations. As yet little has been done in the direction of the destruction of mosquitoes. Trial measures were carried out in Gujránwála and Gujrát, but the severe prevalence of plague in the former interfered with the operations. The same cause, combined with lack of funds, has also prevented much being done in the way of filling up or draining pools around villages; and, speaking generally, village sanitation is still in a very backward condition, but the subject is engaging the consideration of the Sanitary Board, and schemes are on foot for encouraging local effort by the grant of substantial rewards in money. Quinine has, of course, been distributed as usual in a large number of districts.

49. Emigration and Immigration.

(There is nothing to report under this heading.)

50. Medical Relief.

General.

190. There are in the British districts of the Province, 252 dispensaries or hospitals where medical relief can be obtained, with 3,070 beds available for in-door patients. The average daily attendance of in-door patients was 1,813. The hospitals and dispensaries are very largely resorted to by patients who attend as out-door patients or who receive medicines at home from the hospital. The number of such patients treated during the year was 3,260,640, an increase of 291,652 over last year. An increase in the number of children brought to the hospitals and dispensaries for treatment is satisfactory. The number of operations performed was 162,396, an increase of 8,933 over the number in the previous year. All classes of the population resort to the hospitals, which appear to maintain their popularity.

New Hospitals.

191. During the year the foundation stone of the Victoria Zenana Hospital at Delhi has been laid and the new Walker Hospital at Simla opened. The Ripon Hospital has continued to do good work, and the erection of a Contagious Diseases Hospital at Simla for Europeans and Eurasians has also been sanctioned. A site has been acquired at Jullundur for the erection of the Victoria Memorial Hospital, to which Government has contributed a grant-in-aid and the work of construction will shortly commence. The new Jubilee Hospital at Amritsar is now nearly completed. It is a fine building costing 1½ lakhs.

Leper Asylums.

192. There are 6 leper asylums in the Province, and 521 lepers were treated during the year: 39 died and 63 left of their own accord, and the number remaining at the close of the year was 419.

Pasteur Institute.

193. There were 584 patients treated at the Pasteur Institute, Kasauli, of whom 269 were Europeans and 315 Natives. There were six failures, all among natives.

Lunatic Asylum.

194. The Punjab Lunatic Asylum at Lahore continued to do useful work. A new Female Lunatic Asylum has been constructed to accomodate nine Europeans and 64 Natives.

Chemical Examiner.

195. There has been a decrease, as compared with the preceding year, of 78 medico-legal cases, whilst there has been an increase of 55 articles analysed in the General Chemical Department. The prevalence of arsenical poisoning is still very marked, and it is a subject for congratulation that the passing of the Poisons Act of 1904 will afford an opportunity for controlling the sale of this poison.

51. Sanitation.

196. The Sanitary Board met six times during the year, and the Sanitary Engineer was also active in supervising such big projects as have been under construction, *viz.*, the Amritsar Water-Works, the Simla Sewage Extension Works and the Simla Bazár Drainage Works. The last-named project was completed during the year. One of the most interesting experiments has been that made with septic tanks at Simla, and though it has been shown that the biological method of dealing with sewage is by no means as easy and simple as its advocates make out, the results have been on the whole fairly satisfactory, and the initial difficulties connected with the working have been largely overcome. Fifteen projects for drainage works, water-works or sewage works in different towns in the Punjab were approved by the Local Government or the Sanitary Board during the year. The Lyallpur Drainage and Water-Works were completed; the drainage of Chiniot completed, and that of Toba Tek Singh and Gojra—together with a water supply—put in hand. Water-works and drainage projects were sanctioned for Sargodha, and progress has been made

with the water supply scheme of Miánwáli. At Delhi an underground sewer on the north of the Chándni Chowk has been constructed and some progress has been made on the sanctioned scheme for surface drains. A project for new water-works at Dharmsála has been sanctioned and put in hand. At the Ambála City water-works the construction of four new wells was commenced, and the extra-mural part of the drainage scheme of this town was in progress throughout the year. In Lahore the extension of the supply wells of the water-works and the installation of a new engine was completed. A great deal of energy has been infused into all schemes relating to Sanitary Engineering, and satisfactory progress on the whole has been made. Considerable progress has been made in the matter of the protection and clearance of wells in rural areas, but rural sanitation is otherwise in a very backward state.

52. Vaccination.

197. The increased mortality from small-pox during the year has already been noticed. In certain towns no vaccination was done on account of the severity of the plague epidemic. In the majority of the towns in which the Vaccination Act is in force, the vaccination work during the year was satisfactory and, it may be added, the disease was much less fatal in such towns. The total number of vaccinations performed by the District Staff shows an increase of about 9,500 as compared with the previous year.

CHAPTER VII.

INSTRUCTION.

[Detailed information on the subject of Education will be found in the Annual Reports on Public Instruction in the Punjab and in the statistical tables appended thereto, also in the tables under X—Education in the yearly volumes of Judicial and Administrative Statistics of British India published by the Director-General of Statistics. Under heading XII of the same volume statistics of printing presses and newspapers are given.]

53. General System of Public Instruction.

Public Instruction.

198. The general system and history of Public Instruction in the Punjab was explained in the report of 1901-02 (paragraphs 616—635). It will not be treated again till 1911-12.

54. Education.

General Summary.

Total figures.

199. The number of Public Institutions is 3,246 with 194,915 pupils, and of these 247 are in Native States with 14,752 pupils and 2,999 in British Territory with 180,163 pupils. Compared with the figures for 1902-03, the Public Institutions in Native States have increased by 9 and the number of pupils by only 142, while in British Territory the number of institutions and pupils have increased by 7 and 1,244 respectively. The number of Private Institutions in Native States has decreased from 928 to 861, or by 67, and of pupils from 9,050 to 8,844, or by 206. The number of these institutions in British Territory has also decreased from 3,897 to 3,840, or by 57, whereas the number of pupils in them has increased by 511, being 67,471 against 66,960 in the previous year. Taking Public and Private Institutions together, Native States show a decrease of 58 schools and 64 scholars; institutions in British Territory have decreased by 50, while the number of pupils has risen by 1,755. The number of girls under instruction has risen by 107 in Native States, and is now 1,867, and in British Territory by 368, the number being 25,677 against 25,309 last year.

Colleges.

200. There are 18 Colleges—14 in British Territory and 4 in Native States. The Arts Colleges (English) in Native States had 61 students against 44, and in British Territory 1,185, or 47 more than in the previous year. The Oriental College, Lahore, had 79 students against 85, and the Oriental Department of the Patiála College had 35 students, or 10 less than last year. The number of students in the Law College has again diminished, only 133 being returned against 154. The number of students in the Medical College has risen by 18, and at the close of the year under review was 234.

Secondary Schools.

201. The number of Secondary Schools for boys in British Territory has fallen from 300 to 291; the number of students in them is 56,749 against 57,283, or 534 less than returned last year. The number of corresponding schools for girls has, however, risen from 32 to 35, with an increase of 227 in the attendance. The total number of Secondary Schools is, therefore, 326 against 332, and the number of pupils 59,654 against 59,961, showing a decrease of 6 schools and 307 pupils. The number at the High stage is 3,946

against 3,745, at the Middle stage 17,401 against 17,882, and at the Primary stage (Upper and Lower Primary) 38,307 against 38,334. In Native States Secondary Schools have risen from 51 to 53, and the pupils in them from 7,604 to 7,855.

Primary Schools.

202. In British Territory the number of Primary Schools for boys has increased by 9 with 1,455 more pupils than last year. Primary Schools for girls have increased by one, but the number of pupils in them has decreased by 118. Altogether there were 2,633 Primary Schools against 2,623 in 1902-03, with 116,261 pupils against 114,924, which shows an increase of 10 schools and 1,337 pupils. In Native States there are 189 schools against 182 last year, with 120 pupils less than last year.

Special Schools.

203. The number of schools for special instruction has risen from 23 to 26, and the number of pupils from 2,356 to 2,490, an increase of 3 schools and 134 pupils. Six of these (against 4 returned last year) with 278 (or 9 more than last year) pupils are for girls. In Native States there is still one Special School with 14 pupils, or 4 more than last year.

Private Institutions.

204. In British Territory the number of Private Institutions has fallen from 3,897 to 3,840, or by 57 (a decrease of 92 boys' and an increase of 35 girls' schools), but the number of pupils has risen from 66,960 to 67,471 (an increase of 261 boys and 250 girls). In Native States Private Institutions have decreased by 67 and the number of pupils by 206.

Expenditure.

205. The total expenditure on education in British Punjab during 1903-04 was Rs. 39,18,070 against Rs. 35,81,463. This was provided from the following sources :—

	Rs.
Imperial Government	1,35,035
Provincial Government...	13,26,732
District Boards...	5,76,936
Municipalities	3,42,443
Fees	9,78,090
Other Sources	5,60,834

The contribution from the Provincial Government was Rs. 2,87,193 more than last year.

Fees.

206. The income from this source was Rs. 9,88,855, of which Rs. 7,36,629 was from Tuition Fees and Rs. 2,52,226 from Other Fees. There is an increase of Rs. 13,616 under Tuition Fees and of Rs. 17,819 under Other Fees.

PUBLIC EXAMINATIONS.

Arts Examinations.

207. In the Intermediate Examination (Arts) 232 candidates passed out of 505, or 45·9 per cent., against 249 passes out of 559 candidates, or 44·5 per cent., last year. On the Oriental side only 3 went up and one passed, and in Science 14 out of 26 passed. In the First Arts Examination of the Calcutta University one boy appeared from the Bishop Cotton School, Simla, and passed. In the B. A. Examination 273 candidates appeared and 128 passed, or 46·3 per cent., against 126 out of 291, or 43·3 per cent. In the B. O. L. Examination 3 candidates appeared and 2 passed against 2 out of 5 last year. In the B. Sc. Examination out of 5 candidates 3 were successful. In the M. A. Examination 18 passed out of 36. On the Arts side the total number of candidates was 825 and of passes 384 against 885 and 389, respectively, last year.

Oriental Language Examinations.

208. In the Examinations for Oriental Languages 444 candidates appeared and 228 passed against 505 candidates and 252 passes last year.

Civil Engineering.

209. In the First Examination in Civil Engineering 46 appeared and 42 passed against 24 out of 37 in 1902-03.

Law Examinations.

210. In the Law Examinations 18 candidates out of 55 passed the Examination for the Degree of Bachelor of Laws. The decline in the numbers of candidates for this school noticed since 1898-99 still continues.

Medical Examination.

211. In the Preliminary Scientific Examination 73 candidates were examined and 42 passed. In the First Examination for the Diploma of Licentiate in Medicine and Surgery and of Bachelor of Medicine 20 out of 40 candidates were successful, and in the Second Examination 22 passed out of 25 Altogether 138 students sppeared for the various examinations on the College side, and of these, 84, or 61 per cent., were successful against 68 per cent. last year.

Entrance Examination.

212. In the Entrance Examination (Arts, Oriental and Science Faculties), as well as in the Clerical and Commercial Examination, 989 out of 1,942 candidates passed against 1,146 out of 1,937 last year. There were 4 candidates on the Oriental side of the Entrance Examination, of whom 3 were successful. In the Clerical and Commercial Examination 19 candidates passed out of 62. In addition to the Clerical and Commercial School at Amritsar such classes existed during the year also at Hoshiárpur and Rewári Municipal Board and Ráwalpindi Mission Schools.

Middle School Examination.

213. In the Middle School Examination 3,437 candidates out of 5,220, or 65·8 per cent., were successful against 3,083 out of 5,184, or 59·4 per cent., in 1902-03. On the Anglo-Vernacular side 2,393 candidates passed out of 3,702, and on the Vernacular side 1,044 passed out of 1,518. In addition to these, 238 out of 256 candidates who took up English only passed. The Anglo-Vernacular Middle School Examination will in future be discontinued, and a Scholarship Examination will be held every year at the head-quarters of each district at the time of its annual inspection.

UNIVERSITY EDUCATION.

University Convocation.

214. The twenty-third Convocation of the Punjab University was held in the Montgomery Hall on the 19th December 1903, when 162 graduates were admitted to the various degrees as against 188 graduates in the previous year.

Measures of the year.

215. During the year the Central Training College was affiliated to the University, and the Regulations for the Degree of Bachelor of Teaching were framed and submitted to the Government of India for sanction. The Cambridge Senior Local Examination was recognized as equivalent to the Entrance Examination. Inter-College Rules were framed by the University, and sanctioned by Government.

Arts Colleges.

216. At the close of the year the number of Arts Colleges was 15,—13 English and 2 Oriental. Of these 11 are in British Territory and 4 in Native States. The Colleges which attract the largest number of students are the Forman Christian College, the Dayánand Anglo-Vadic College and the Government College, all at Lahore.

Professional Colleges.

217. There are in the Punjab three professional Colleges for Law, Medicine and Teaching. The first is under the direct control of the Punjab University; the second and third are Government institutions.

Students.

218. The total attendance in Arts Colleges (English) in British Territory increased from 1,138 to 1,185. In the First Year Classes there are 382 students; in the Second Year Classes 418 students; in the Third Year Classes 153 students; in the Fourth Year Classes 192 students; and in the M. A. Classes 40 students. In the professional Colleges the number rose from 455 to 494.

Oriental College, Lahore.

219. The number of students on the rolls of the Oriental College at the close of the year was 79 compared with 85. In the School Department there

were 41 compared with 54. Instruction is also given here in Oriental languages to 117 students of the Government College. Progress is being made in the production of text-books in the Vernacular by the staff of the College.

SECONDARY EDUCATION (BOYS).

Number of Schools.

220. A decrease of 10 occurred in the number of Anglo-Vernacular Middle Schools in consequence of the non-recognition or closure of certain inefficient unaided institutions in the Lahore and Ráwalpindi Circles. The total number of Public Secondary Schools for boys, European and Native, is now 291. The policy of Government, of having one Government Model School at the head-quarters of each district, will soon be carried into effect.

Number of Pupils.

221. The total number of boys attending the Secondary Schools is 56,749, and of this number 36,020 are in the Primary stage of instruction. The total number of pupils in Anglo-Vernacular Schools fell during the year from 39,730 to 39,342 and in Vernacular Schools from 17,553 to 17,407, the decrease in the former being confined to institutions under private management; whilst the Government and Board Schools have an upward tendency, however small. The above decrease is due partly to the effects of the plague and partly to the exclusion of unrecognized institutions from the list of Public Schools. The number of boys in the Secondary stage of instruction reading in Anglo-Vernacular Secondary Schools at the end of 1903-04 was 15,580 against 15,598 in the previous year. Of these, 11,774 against 12,004 were in the Middle stage, and 3,806 against 3,594 in the High stage; the increase of 212 in the latter is satisfactory. The character and method of teaching has improved considerably in Secondary Schools.

PRIMARY SCHOOLS (BOYS).

Number and Classes of Schools.

222. The number of Primary Schools has risen from 2,289 to 2,298, or by 9. Of the whole number, 1,640 are Government and Board Schools, 555 Aided and 103 Unaided. The increase of 9 schools is accounted for by a rise of 16 and 11, respectively, in Board and Aided Schools, the fall being mostly in the Jullundur Circle. The number of Zamíndári Schools is 192 against 186.

Number and distribution of Scholars.

223 The number of pupils has risen from 192,056 to 103,511, or by 1,455; the increase was mainly in Board Schools. Of the whole number in Primary Schools, 17,066 are at the Upper Primary stage and 86,455 at the Lower Primary stage. The number of agriculturists is returned as 49,827 against 48,875, or an increase of nearly 2 per cent. At the same time the number of agriculturists reading in Zamíndári Schools has risen from 3,832 to 3,929, or by 97.

Expenditure.

224. The total expenditure is now Rs. 4,69,110 or Rs. 4,341 more than in the previous year; of this increase Rs. 3,814 was on Government and Board Schools, while there was a reduction in expenditure, amounting to Rs. 2,141 on Unaided Schools, due to a falling off in receipts from private sources. The increased expenditure on Primary Departments of Secondary Schools is due partly to better salaries paid to a few teachers and partly to better equipment of the schools as regards furniture, maps and other appliances.

Fees.

225. The income from fees received in Primary Schools rose from Rs. 68,705 to Rs. 69,721, or by Rs. 1,016. The increase is almost entirely in Government and Board Schools. The Code rules regarding the levy of tuition fees are generally well observed in Board and Aided Schools, the rates being arbitrary in Indigenous and Unaided Institutions.

Zamindari Schools.

226. The number of Zamíndári Schools has risen from 186 to 192, or by 6, but the number of scholars attending them has fallen from 5,853 to 5,695, or by 158. Of the agriculturists attending Primary Schools (58,351 in all) only 3,929 attend Zamíndári Schools. Urdu is the medium of instruction in all the Zamíndári Schools, except 10 in Delhi and Jullundur Circles, where Nágri is taught. Every effort has been made to popularise these schools, but without success.

General Remarks.

227. The record of the past year is one of progress. The number of schools and pupils has risen, the examination results are satisfactory, and the fee receipts and expenditure from public funds are larger. Rupees 40,000 were paid from Provincial Revenues during the year in addition to the Rs. 60,000 paid last year towards the improvement of Primary School buildings under Local Bodies. The character of the instruction given is improving.

TRAINING INSTITUTIONS.

Numbers and kind of institutions.

228. The Central Training College, Lahore, trains students for English Masterships in all departments of schools and in Vernacular Masterships in Secondary Departments. There are also 5 Normal Schools at Ráwalpindi, Lahore, Jullundur, Multán and Delhi where students are trained for the work of a teacher in Primary Schools and Departments. St. Bede's College, in connection with the Convent at Simla, has recently been opened for the training of women teachers in European Schools. It has been provided with suitable buildings, the funds for which were liberally supplemented by Government. The College commenced work at the beginning of the year with a roll of 16 students. All the Training Institutions for Natives are under the control of the Education Department. The Central Training College is under the Director's immediate control, the Normal Schools under the Circle Inspectors, with the exception of that at Lahore, which is supervised by the Principal, Central Training College. The latter visits all Normal Schools annually. The staff of each Training Institution has been increased in view of the duplication of classes consequent on the extension of the course of the training to two years.

Model School, Lahore.

229. The Central Model School, the Practising School for the Central Training College and the Lahore Normal School, continues to be most successful and popular. The marked and continued success of the students in the different public examinations has entirely removed whatever prejudice there may have been years ago against a school where so much teaching was done by students under training. The numbers on the rolls have risen from 713 to 766, an increase of 53 over last year. The income from fees has increased from Rs. 11,331 to Rs. 12,675. The results of the public examinations were good, especially so in the Middle and Entrance Examinations, and achieved as usual a striking success in the Science Faculty. During the year no less than 1,560 lessons were given in the school by students in training, and each lesson was carefully criticised by the masters.

Character and results of training.

230. The Central Training College has been in existence for over 22 years, while the Normal Schools are considerably older. From the experience thus gained, from the results of examinations and from the reports on the works of students after leaving the Training Institutions, the training may be safely characterised as sound. It comprises lectures on the Principles of Education, Methods of Teaching and School Management, Model Lessons, Criticism Lessons, continuous work in the Practice of Teaching in the Model School for a week at a time, and visits of observation to the Model School. Drawing and the method of teaching it, Kindergarten (Theoretical and Practical) and Drill and Gymnastics are compulsory subjects in all Training Schools. In Normal Schools Agriculture and Land Surveying are also compulsory. A high standard of discipline is maintained, and generally an excellent tone prevails. In the Central Training College the students are selected with much care, and their after-career in schools is almost invariably characterised by a marked influence for good. Physical training is given with a view not only to their own benefit and development, but also to train the students for this important part of their work as teachers. Drill and Gymastics have been as usual regularly taught. All students are required to give three hours a week to this work and to the study of the principles of Physical Training. The course of general instruction has hitherto been completed in one year, but for all classes the training now lasts for two years. In the Normal Schools there were 248 under training against 255 last year. The number on the rolls in the Central Training College increased considerably,

being 127 as against 85 last year. The results of the Certificate Examinations were very good in the case of the Central Training College and fairly satisfactory in the case of the Normal Schools.

Training in Agriculture and Mensuration.

231. Practical Agriculture and Mensuration continue to receive very fair attention in the Normal Schools. At Lahore and Multán extra land has been acquired for practical work in Agriculture. And arrangements are in progress to obtain suitable sites for the purpose at the other Normal Schools. Land Mensuration and Practical Field work also receive attention.

Training of Female Teachers.

232. Thirty-two girls were under traning during the year, of whom 19 were in the Senior Vernacular Class and 13 in the Junior Vernacular Class. The results of the Senior Vernacular Certificate Examination show 8 girls as having passed, a similar result to that of last year. In the Junior Vernacular Certificate Examination 4 girls passed.

Supply of trained Teachers.

233. The supply of trained teachers is still insufficient, but the total number admitted into the Central Training College and Normal Schools this year is nearly double that of former years.

PROFESSIONAL EDUCATION.

Law.

234. The Law College is under the direct control of the Punjab University. The attraction of the law as a professional career seems to be less strong than formerly, as the decline in the number of students noticed in 1898-99 still continues.

Medicine.

235. The medical profession, on the other hand, attracts an increasing number of recruits; the number of students in the Medical College, Lahore, has again increased from 216 to 234. The hospitals in Lahore afford facilities for practical instruction in the practice of Medicine and Surgery, and the Lahore College of Medicine deservedly maintains its high reputation.

Medical training of women.

236. The North India Medical School for Christian Women at Ludhiána had 42 students on its rolls at the end of the year against 49 last year. Training is given in Medicine, Nursing and Compounding.

Native systems of Medicine.

237. Instruction in the Native systems of medicine can be obtained at the Madrassa-i-Tibya, Delhi, and in the Vedic and Yunáni Classes attached to the Dayánand Ango-Vedic College and to the Islamiya College, Lahore. As regards the two latter, in the absence of facilities of clinical instruction, the question of their retention or abolition is under consideration. At the Madrassa-i-Tibya, Delhi, regular instruction is given in Arabic in the Yunáni system of medicine, supplemented by a few lectures on Anatomy and Surgery by an English doctor. The roll of students has risen from 91 to 120 during the year.

Veterinary College.

238. The number of students on the rolls of the Lahore Veterinary College is now 128, and shows a slight increase during the year. The competition for admission to the College has largely increased. A demand continues for trained Veterinary Assistants both in the districts and in the Remount and Transport Department, and the reputation of the College stands high. The results of the examination this year show a very marked improvement on previous years, and are in every way satisfactory.

TECHNICAL EDUCATION.

Mayo School of Art.

239. The number of students on the rolls of the Mayo School was 302, which is the same as last year. Fifteen students left the school during the year and all found employment as Teachers or Drawing Masters in Schools. An Engineering Class maintained by the Punjab University is attached to the Mayo School and is very popular.

Railway Technical School.

240. The Railway Technical School has increased in all departments. The number of students has now reached 441, and they receive both a general and a technical education. Technical training is afforded in Drawing, Carpentry and Smiths' work. A separate room for lathe work has been built, and a new Science room is approaching completion. Evening classes are held for artisans who are not able to attend the day school.

Industerial Schools and Institute.

241. Industrial Schools are maintained by the Municipalities of Amritsar and Delhi and by the District Board of Ludhiána. There is also a Hindu Technical Institute at Lahore, which makes provision for teaching Drawing, Carpentry, Smiths' work, Engraving, Rubber Stamp-making, Short-hand and Type-writing. The number of students who avail themselves of these facilities is not very large. Nevertheless the institution is reported to be doing useful work.

Clerical and Commercial Classes.

242. The Clerical and Commercial School at Amritsar is now a well-established institution, and is maintained by the Local Municipal Board. It had 59 scholars on its rolls at the close of the year. Drafting, Book-keeping, Précis and Type-writing and Short-handwriting are taught. Similar classes are attached to the Municipal Board Schools at Rewári and Hoshiárpur and to the Mission School at Ráwalpindi. The last mentioned appears to be holding its own. The others do not yet show much vitality.

FEMALE EDUCATION.

Number of Schools and Scholars.

243. There has been a very small increase in the number of Girls' Schools, from 32 to 35 in the case of Secondary Schools and from 334 to 335 in the case of Primary Schools. The number of pupils receiving instruction in the Primary stage is nearly the same as last year, 15,037 against 141,908. In the Secondary stage there is a decrease in the number of pupils from 638 to 618.

Districts where female education is most advanced.

244. The Amritsar District again returns the largest number of girls attending Public Schools for Natives—2,064; the Lahore District returns 1,814, Ráwalpindi 1,404, Siálkot 1,400, Gujránwála 851, Delhi 751, and Jullundur 707.

Results of Examination of Girls.

245. For the Entrance Examination 47 girls appeared, of whom 36 passed, and for the Middle School Examination, 83 girls appeared, of whom 51 passed. In the Upper Primary Examination 584 girls appeared and 439, or 75 per cent., passed. In the Lower Primary Examination 815 out of 1,200 girls passed. All the successful Native candidates in the Entrance and Middle School Examinations were from the Christian High Schools at Lahore and Amritsar.

General Remarks on the progress of Female Education during the year.

246. The schools have been carried on during the year with much difficulty on account of the plague, those districts with the largest number of Girls' Schools being specially affected. In Gujránwála, Siálkot, Jullundur, Ludhiána, Ráwalpindi and other places the schools were entirely closed for two or three months, and there were many deaths among both teachers and pupils. The want of trained teachers continues to be felt; but most of the large Mission Schools train Christian girls for their own schools and their branches, and a satisfactory feature this year is the proportion of Hindús who have obtained certificates as teachers, since it is for Hindu teachers that there is the greatest demand. It is hoped that it will not be long before a Female Normal School is established at Lahore in connection with the Victoria Girls' School, which it is proposed to utilize as a practising school.

EDUCATION OF PARTICULAR CLASSES.

European Schools.

247. There are 40 European Schools in the Province, of which 36 are Public European Schools and 4 are Private. One Public School, *viz.*, St. Thomas' School at Murree, was closed during the year. Sixteen out of the 40 schools are boys' schools and 24 are girls' schools. All the European public

schools except 4 are managed mainly by religious bodies, and all but the Park School, Simla, are aided by Government. The four exceptions are the Lawrence Asylums at Sanáwar, which are Government institutions, and two Railway Schools. The number of pupils receiving instruction in these schools was 2,508, of whom 1,725 are in the Primary stage of education. There are no special Technical Schools for Europeans in the Punjab; but in some of the schools for general education, industrial and technical work is done. Thirty-seven per cent. of the expenditure on European Schools was derived from fees, 43 per cent. was contributed by Government, Imperial and Provincial, and the rest was obtained from other sources.

Muhammadans.

248. The number of Muhammadan boys receiving instruction in Public Institutions of all kinds is now 7·47 per cent. of those of school-going age, compared with 12·35 for Hindús and 13·37 for Sikhs. In the Secondary stage of Anglo-Vernacular Schools the percentage of Muhammadans is only 0·51, and is less than one-half of that of each of the other two communities. In Public and Private Institutions together this percentage in the case of Muhammadans, Hindús and Sikhs is now 11·77, 15·05 and 15·56, respectively, showing a slight rise in favour of Muhammadans and Hindús and a slight fall in the case of Sikhs. The Sikhs continue to take the lead both as regards boys and girls' education, being closely followed by the Hindús. Muhammadans are conservative in their preference for Private Schools and the instruction obtained in the mosque, but though still the most backward class, they are showing themselves more alive to the need and benefit of the education obtained at the Public Schools. The special concessions of free and half-rate fees allowed to Muhammadans continue to be enjoyed by them.

The Aitchison Chiefs' College.

249. The number of pupils at the close of the year was 69, an increase of 2 on that of the previous year. During the year 20 students left and 22 joined the institution. It has been decided that each of the boarding-houses shall in future be placed under the charge of a European House Master. The instructional state of the school is satisfactory, and the results of the Primary and Middle School Examinations were excellent. The receipts during the year amounted to Rs. 1,05,317.

Private Schools.

250. During the year the total number of Private Schools has fallen from 4,825 to 4,701. The total includes 576 girls' schools with 9,744 scholars. The decrease in the number of Private Schools is chiefly due to the prevalence of plague in the Province. With the exception of Rote Schools, which alone show a gain of 1,833 pupils, the strength of every type of Private School has gone down. Private Schools are useful in extending elementary education among the masses, and are encouraged by the award of grants-in-aid on easy terms. The number of schools examined for grants during the year rose from 586 to 592; and the efficiency of these schools is found to be improving.

MISCELLANEOUS.

Native States.

251. The number of Colleges in Native States remains the same, *viz.*, three, situated at Patiála, Baháwalpur and Kapurthala. The total number of students at these Colleges is 96. There are 243 Public Schools in the Native States against 234; and of these 53 are Secondary with 7,855 pupils, 189 are Primary with 6,787 pupils, and one is a Special School with 14 students. The number of pupils in Indigenous Schools has fallen, and there is a slight decrease in the number of scholars under instruction in all kinds of institutions; but it is satisfactory that the number of girls has risen from 1,760 to 1,961.

Moral Training and Discipline.

252. The importance of moral training is kept in view in every class of educational institution. Physical Training forms an essential part of the curriculum of every school, and during the past year has received special attention; and it is directed so as to train the pupils in the valuable moral qualities of initiative, self-reliance, voluntary obedience to recognized rules, and the spirit of co-operation. The personal influence of teachers is a most

important factor both in the moral and mental education of the pupil, and the advance which has been made in the Training Schools to raise the qualifications of teachers is being attended with the best results. The superior quality of the trained teachers is everywhere noticed.

Boarding-Houses.

253. At the end of the year there were altogether 294 boarding-houses with 10,479 boarders. Of these 272 are for males and 22 houses for girls. Of the 294 boarding-houses, 12 are managed by Government, 178 by Local Bodies, 41 are Aided and 63 are Unaided. Extension of the boarding accommodation is being provided for at the Government College and at the Medical College, and additions and extensions have been made to the accommodation of the Dayánand Anglo-Vedic College, the Islámia College, the Hindu College, Delhi, the St. Stephen's College, and to the combined boarding-house of the Central Training College, the Lahore Normal School and the Central Model School. The school boarding-houses attached to Secondary Schools are generally satisfactory, but insufficient accommodation and overcrowding, defective lighting, want of medical attendance and inadequate equipment are reported at several places.

Educational Conferences and Exhibition.

254. A General Educational Conference was held at Lahore on the 21st April 1903, and the four following days, when many questions of educational interest were advanced a stage with a view to further action. This was followed by a Conference of Inspecting Officers under the presidency of the Inspector of Schools of Lahore Circle which dealt with certain matters of a technical departmental character. Finally, an Educational Exhibition, the first of its kind, was held in the third week of April 1903, and it proved to be not only extremely popular (the total number of visitors being 35,252), but to have a very real educational value of its own both to teachers and pupils.

55. Literature and the Press.

Literature.

255. The total number of books and periodicals published during the year was 1,478, compared with 1,233 in 1902. Urdu as usual has the largest number of publications, 601; Punjábi with 397 comes next. Of the total number, 129 are periodicals, a form of literature which shows signs of increasing in importance. The "Makhzan," the only Urdu Literary Magazine, is a journal of some enterprise, supported by the younger literary talent of the Province. The publications of the year do not include any very remarkable works. About one-third of the total number are concerned with religion. Pamphlets dealing with the Muhammadan religion, consisting chiefly of prayer books, chapters of the Qurán, with or without notes, genealogies of saints, and catechisms, are especially numerous. The polemical writings are also as numerous and generally speaking of as little worth as ever. The biographies include an interesting sketch of the Caliph Ottoman. No history except a history of the Delhi Darbár has appeared. Among translated works may be mentioned the Life of Lord Roberts. The popularity of works of fiction is increasing, and their general character remains the same. Those of more value, such as "Cosmopolitan Hindúáni" by Mrs. Tahl Rám or the "Jamashaid," use the form of fiction to convey the authors' views on the social or religious problems of the day.

Statistics of newspapers.

256. There were 210 newspapers published in the Punjab and North-West Frontier Province during the year 1903. Of these 31 were published in English, 165 in Urdu, 1 in English and Urdu, 6 in Hindi and 7 in Gurmakhi. Three English and 38 Vernacular newspapers were started and 3 English and 43 Vernacular ceased to exist during the year, leaving a total of 164 on the register. One was published yearly, 1 quarterly, 70 monthly, 28 twice a month, 5 three times a month, 94 weekly, 3 twice a week, and 2 thrice a week. There were 6 daily newspapers.

Press Prosecutions.

257. There were no Press prosecutions duirng the year under report.

56. Literary Societies.

258. The subject was reviewed in the report of 1901-02. It will not be treated again till 1911-12.

57. Arts and Sciences.

Lahore Central Museum.

259 The popularity of the museum is well sustained, and the experiment of having a zenána day continues to be a success.

CHAPTER VIII.

ARCHÆOLOGY.

[Detailed information on the subject of this chapter will be found in the following publication :—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for 1903-04; Annual Progress Report of the Archæological Survey, Punjab and United Provinces Circle, for the year ending 31st March 1904.]

58. Archæology.

Maintenance and restoration of archæological buildings.

260. The restoration of the Moti Masjid and the Bhádon and Sáwan buildings in the Delhi Fort were completed at a total cost of Rs. 8,006. The stone elephant, supposed to have been brought from Chitor by the Emperor Akbar, was taken from the Queen's Gardens and re-erected at the Delhi Gate of the Fort on the spot where it was originally set up by the Emperor Shah Jahán. The interesting tomb of Ísa Khán, with its mosque and enclosure, which had become a small village, was taken over and cleared of residents, due compensation being paid. The restoration of Shams-ud-dín Atgah's tomb at Delhi is in progress, and also that of a portion of the inlay work and stone flooring at Jahángir's tomb, Shahdara. In all, a sum of Rs. 45,000 was spent on the restoration of archæological buildings.

Archæological survey.

261. During the year the Punjab and the United Provinces were formed into one circle for the purposes of the archæological survey with head-quarters at Lahore, and the North-West Frontier Province and Balúchistán were formed into a separate circle. It was arranged that Dr. Vogel, the Superintendent of the Archæological Survey of the Punjab and United Provinces, should confine his investigations to the Buddhist and Hindu antiquities, while the newly-appointed Archæological Officer, Mr. Shepherd, should take charge of the Muhammadan buildings in the amalgamated circle. The lamented death of Mr. Shepherd only five months after his appointment left a vacancy which only recently has been filled again. During the first month of the year Dr. Vogel was engaged in excavations at Chársada (Pesháwar District, North-West Frontier Province). The objects discovered in the course of the work were left in charge of the Secretary of the Municipal Committee, Pesháwar. They are destined for the museum which will be built in that city in connection with a Memorial Darbár Hall. The month of June was spent by the Surveyor in Chamba in continuing the epigraphical work of the previous summer. A considerable number of copper plate inscriptions were recovered, from all of which ink-impressions were taken and transcripts prepared. No fresh copper plates of the pre-Muhammadan period were discovered. The Archæological Surveyor then proceeded to Kashmír, visiting all the ancient Kashmír temples with the exception of a few of minor importance. A list of the ancient monuments both in Kashmír and Chamba was prepared, and a report on the state of preservation of the ancient monuments in Kashmír was also submitted by the Archæological Surveyor. The account of the results of the research of the Archæological Survey, contained in Part II of the Surveyor's report for the year, includes notes on inscriptions on stone discovered at the hamlet of Saráhan in the Chamba State and in a ruined tank in Sirmor; a list of and discussion on various Gandhára sculptures, deposited in the Lahore Museum and elsewhere, and interesting notes on "Tile mosaics on the Lahore Palace," and on "the Shalimár Bágh at Delhi."

CHAPTER IX.

MISCELLANEOUS.

59. Ecclesiastical Jurisdiction.

[See page 189 of the Report for the year 1901-02.]

60. Ecclesiastical.

262. The various ecclesiastical institutions in the Punjab were noticed in the report for the year 1901-02. There is nothing fresh to add.

61. Stationery.

263. The Punjab Administration depends on the Stationery Department, Calcutta, for its requirements in this respect. The value of stationery issued to officers in the Punjab during the year aggregated Rs. 1,29,273, compared with Rs. 98,568 last year. The details are as follows:—Cost of printing paper Rs. 32,975, office stationery Rs 95,778 and pad locks Rs. 520 against Rs. 49,585, Rs. 48,576 and Rs. 407 respectively in the previous year.

62. Government Press.

264. The following statement compares the income and expenditure with the value of work turned out during the years 1902-03 and 1903-04:— Income and Expenditure.

Income.		Expenditure.		Value of work.	
1902-03.	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
8,057	16,353	1,26,242	1,21,479	1,32,366	1,12,506

The income of the Press during the year under report was more than double that of the preceding year, the figures for the two years being respectively Rs. 8,057 and 16,353. The total expenditure during the year under report amounted to Rs. 1,21,479 against Rs. 1,26,242 in the previous year, or a decrease of Rs. 4,763 as compared with the figures of the preceding year. The cost of work done by the Contractors for Government Printing for Departments and Offices during 1902-03 and 1903-04 was Rs. 69,731 and Rs. 49,165 respectively.

PUNJAB ADMINISTRATION REPORT, 1904-1905.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1904-1905.

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SUPERINTENDENT, PUNJAB GOVERNMENT PRESS, LAHORE.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1904-05.

PART I.

GENERAL SUMMARY.

[The "year" throughout this report is not invariably the financial year ending 31st March 1905. At the heading of each chapter, with the exception of Chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in Chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March, in Chapter II it is the revenue year ending 30th September 1904, and in Chapters III and VI it is the calendar year ending 31st December 1904.

The Administration Report for 1901-02 was a decennial report and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of Part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.]

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir Charles Rivaz, K.C.S.I., held the office of Lieutenant-Governor throughout the year.

Changes in the Administration.

2. In consequence of the separation of the new Punjab from the Frontier, it was considered advisable for the purposes of the administration to constitute two new districts, those of Attock and Lyallpur; the notifications regarding them operating from the 1st April and 1st December 1904, respectively. This re-arrangement has necessitated the reconstitution of the Ráwalpindi and Multán Divisions, and of the districts of Ráwalpindi, Jhelum and Jhang.

NATIVE STATES.

Relations with Tributary States.

3. His Honour the Lieutenant-Governor visited the Sirmúr State in November 1904, and the Farídkot State in January 1905; and on the 12th May 1904 formally installed Rája Bhure Singh on the Gaddi of the Chamba State. Major J. R. Dunlop-Smith, C.I.E., remained in charge of the Phulkián States and Baháwalpur Agency until the 20th March 1905, when he proceeded on leave and was succeeded by Major C. M. Dallas. The minor Chief of Patiála, Maháraja Bhupendra Singh, who joined the Aitchison College on the 22nd October 1904, was obliged to undergo treatment at the Pasteur Institute at Kasauli in March 1905; and it is satisfactory to record that His Highness suffered no inconvenience from the treatment. The financial condition of the Patiála State continues good, and there has been considerable progress made in municipal and administrative matters. It is anticipated that the settlement operations in this State will be finally concluded in October 1908. The Tikka Sáhib of Nábha happily recovered from an attack of enteric fever in Simla. The Baháwalpur State has been blessed by the birth of a son and heir to the Nawáb; and the same must be recorded as regards the Rája of Keonthal, and the Wali-ahd, Sáhibzáda Ahmad Ali Khán of Máler Kotla, who, since the 1st February 1905, has been permitted to exercise, subject only to the control of the Commissioner of the Jullundur Division, the powers formerly entrusted to the Superintendent. The connection of the Nawáb of Loháru, Sir Amír-ud-dín Ahmad Khán, K.C.I.E., with the Máler Kotla State has therefore now ceased. The Rája of Kapurthala, Sir Jagatjit Singh, K.C.S.I., proceeded to Europe in March last on an eight months' visit to arrange for the education of his sons. Rája Bhowáni Sen, Chief of the Mandi State, continued to make progress in the duties of government under the guidance of Mr. T. Millar, C.S.

Plague in Native States.

4. Plague has raged with a virulence even greater than that of last year in the States of Patiála, Jínd, Nábha, Kapurthala, Máler Kotla, Farídkot and Dujána, in which last State the pestilence was so severe during the spring of 1905 that it is estimated that two-thirds of the population evacuated the town of Dujána in order to escape from its ravages.

Agricultural conditions in Native States.

5. The agricultural conditions in the Native States were generally good.

CONDITION OF THE PEOPLE.

Health of the people.

6. Except for the increasing virulence of plague, the year has been one of average prosperity. Owing to the epidemic there was the same scarcity of labour as was experienced last year in several districts, the Shahpur District and the Jhelum Colony again suffering most severely. Otherwise the year was distinctly favourable as regards the health of the people; and the agricultural conditions prevailing were good.

ADMINISTRATION OF THE LAND.

Land Revenue.

7. Part II of this report reviews the history of the Revenue Administration of the Province up to the end of September 1904, and relates to a period antecedent to that dealt with in the account given of the weather and crops in Chapter IV. The weather conditions which prevailed during the period on which the revenue of the year depended are described on page 25 of the

Administration Report for the year 1903-04. The seasons were generally favourable; and the result was an all-round good kharíf harvest, while the spring harvest was also much above the average, the failed area amounting to little more than half as much as in the previous year. The scarcity of labour already referred to caused a loss of crops due to delay in harvesting in the Shahpur District; while Delhi, Gurgaon, and parts of Rohtak and Ferozepore suffered from want of rain. A most satisfactory feature of the year is the fact that whereas last year only 34 per cent. of the land revenue of Hissar could be collected, no less than 95 per cent. of the demand was collected this year; while, as regards collections on account of previous years (which have more than doubled), more than 2 lakhs have been recovered in the Hissar District. It was only necessary to suspend some $3\frac{3}{4}$ lakhs, and these suspensions were mainly necessitated by the effects of the plague. Favourable agricultural conditions facilitated the collection of the demand and the recovery of arrears; and the net result shows a further considerable expansion of the revenue of the Province, the Chenab and Jhelum Colonies being mainly responsible for the increase under the heading of fluctuating land revenue. The large increase in miscellaneous land revenue noticed last year was chiefly of a temporary nature due to the proceeds of the auction of land and shop sites in the colonies; and the absence of these factors during the present year accounts for the decrease in miscellaneous land revenue collections.

The Land Alienation Act.

8. There can now be little doubt that Act XIII of 1900 is gradually becoming better understood; and it is satisfactory to learn that this better understanding does not appear to be co-existent with any serious attempts to evade the Act's provisions. An item of importance in connection with this Act is the Chief Court's ruling that land as defined in the Act includes occupancy rights in land. It is yet too early to prophesy that the success of the Co-operative Credit Societies will ultimately cause the money-lender to invest his wealth in commercial undertakings; but it may safely be asserted that the price of land is rising towards the level of the prices which prevailed before the passing of the Land Alienation Act.

Surveys.

9. During the year under report the Province was visited by a Survey Committee; and difficulties in connection with the riverain surveys also formed a subject for discussion at Simla. Survey of India Party No. 18 (Punjab), though somewhat hampered by an insufficiency of staff, got through a large amount of useful work in the Multán, Amritsar, Ferozepore and Muzaffargarh Districts, and the Native State of Baháwalpur, in which State good progress was also made in the work of demarcating the boundary between the State and the adjoining district of Montgomery. The final approval of Government has been conveyed to the settlement of a fixed boundary between the Jammu State and the Gujrát District; fixed boundaries are being laid down on parts of the Chenab and Ravi Rivers; and the work of mapping all the estate boundaries in Simla has been brought to a conclusion.

Settlements now in progress.

10. Satisfactory advances were made during the year in Settlement work in the Punjab and the North-West Frontier Province. Without counting Attock, where the work has now been finished, seven settlements were in progress, under the supervision of the Punjab Settlement Commissioner, *viz.*, at Jhang, Háfizabad, Ráwalpindi, Miánwáli, Gurgaon, Dera Ismail Khan and Hazára. Settlement operations in the Gurgaon, Karnál and Rohtak Districts

have since commenced; but the re-settlement of the old Dera Ismail Khan District and the settlement of Hazára has occupied a longer period of time than was originally anticipated.

Destruction of the Kangra records.

11. Most of the Kángra records were destroyed by a fire which completely burnt out the record-room at Dharmsála. Everything possible is being done to repair this loss by making duplicates of the Patwáris' maps and records.

Chenab Canal Colony.

12. A separate district has now been formed at Lyallpur consisting of the Colony Tahsíls of Lyallpur, Toba Tek Singh and Samundri; and it is satisfactory to be able to record that the colony is in a flourishing condition. While the allotted area has increased, there has been a very great increase in the area sown with crops. A matter of paramount importance to the well-being of a new colony is that of communications, and the sanction accorded to the construction of a railway line from Sháhdara to Sángla deserves notice. An interesting feature in the history of the colony is the Agricultural Show held for the first time during the year under review. The Experimental Farm at Lyallpur has been increased in area, and experiments are to be made in growing selected varieties of wheat for seed distribution. The application of mule-breeding conditions to grants of land held by lambardárs is meeting with success, and the new district is one of the five selected in which to push the improvement of the cotton staple.

Jhelum Colony.

13. In the case of the Jhelum Colony a similar record of progress must be made, where some twenty-nine thousand acres still await allotment. The peasant-colonists who are to receive land on horse-breeding terms have all been selected; and the Remount Department are satisfied with the class selected as horse-breeders. Eight out of ten regimental horse runs have been given out; and paddocks and quarters are being constructed. A Colony Seed Farm has been inaugurated at Sargodha, and the experiments to be carried out there will be watched with interest.

LEGISLATION.

Act I, Punjab, 1904.
Act II, Punjab, 1905.
Act III, Punjab, 1905.

14. Of the five Acts passed during the year three require special mention, namely, the Punjab Loans Limitation Act (by which the period of limitation for the recovery of loans has been extended from three to six years); the Act to amend the law relating to Pre-emption (designed to regulate the existing law in respect of both towns and villages, and to bring the law in villages into conformity with the Alienation of Land Act); and the Punjab Minor Canals Act (which was framed to meet the case of the smaller canals to which the Northern India Canal Act was found to be inapplicable).

POLICE.

Police Commission and Police Administration.

15. The Government of India have passed orders on the recommendations of the Indian Police Commission; and the changes which will now be made involve extensive measures of reform in every department of the Police administration. There will be a considerable increase made to the existing staff, together with an increase of pay to all ranks; and, while measures are to be taken to insure the more methodical working of the department as a

whole in the prevention, detection and investigation of crime, the necessity for co-operation in these matters on the part of village communities will not be lost sight of. Radical changes of this description cannot be introduced without considerable alterations to the existing system, and a new Police Bill has consequently been prepared. This year's report on the administration affords evidence that, though serious crime was on the whole less than in the previous year, with the exception of murder cases, a much greater decrease might reasonably have been looked for in a year when, though plague was more than ever virulent, the agricultural conditions were more than usually favourable. It is encouraging to note that the value of deterrent measures is becoming better recognized year after year. Eight new punitive posts have been established, and the awarding of suitable sentences to habitual offenders continues to occupy more and more the attention of the Courts. The Training School and Criminal Identification Bureau are able to show satisfactory results; and the Police of the Native States, as well as cordially co-operating with our own Police, are also beginning to appreciate the benefit which results from a training at our school.

Criminal Justice.

Deterrent sentences.

16. Reference has been made in the foregoing paragraph to the fact that the undue leniency with which Magistrates were wont to treat habitual offenders is now giving place to more drastic and suitable procedure; and, though this year's report on Criminal Justice contains the seemingly inevitable complaint regarding the manner in which the time of the Courts is wasted by litigious persons, still it is encouraging to learn that the Courts are making a freer use of the sections of the Code which enable them to dismiss frivolous complaints *in limine* and to fine the persons by whom such complaints are brought. A large increase in the number of sentences enhanced by the Chief Court proves that any undue leniency on the part of the lower Courts is being checked.

Prisons.

Punishment of crime.

17. Favourable agricultural conditions may usually be trusted to produce a corresponding decrease in crime, and there is a satisfactory decline this year in the number of admissions to jails. The discipline and efficiency of the jail establishment was satisfactory: corporal punishments have decreased, though special attention is now paid to the exaction of full labour from convicts. That the sanitary condition of the Punjab jails is exceptionally good is evidenced by the abnormally low death-rate of 19·88 per thousand, only one death occurring from plague. The segregation of habitual offenders from those less hardened to a life of crime forms one of the most important measures of jail reform; and the year holds a creditable record for the provision of additional cubicular accommodation. The increasing attention paid by the judiciary to the importance of meting out adequate punishment to habitual offenders has already been referred to, and striking proof of this is afforded by the increase in the number of prisoners sentenced to transportation. It cannot yet be said, however, that sufficient use is made by the Courts of the newly opened Reformatory School at Delhi when dealing with juvenile offenders. The problem of the mark system still awaits a satisfactory solution.

CIVIL JUSTICE.

The Chief Court.

18. The appointment of four extra temporary Judges and the conversion of the fifth Judgeship into a permanent appointment should do much to relieve the pressure of arrears which had for some time past accumulated. The untimely death of the Hon'ble Mr. J. A. Anderson, who had been a Judge of the Chief Court since 1898, forms a matter for regret in which the whole Province will share.

Civil case work generally.

19. There has been a further decrease in the number of suits instituted, and a satisfactory improvement in the number of suits disposed of, though the average duration of contested cases has slightly risen. Plague and the new rules regarding limitation appear to be the chief factors responsible for the decline in institutions; while to the former cause is ascribed the increase in the duration of cases and the rise in offences relating to matrimony. In the Courts of Divisional Judges the pending file has risen, and in District Courts it has been substantially reduced, while the average outturn of work by almost every class of Court exhibits a decided improvement. Though further enquiries tend to confirm the theory that a considerable number of decrees are satisfied privately out of Court, the percentage of realizations in execution of decrees still exhibits the disappointing figure of only 24 per cent.—the same percentage as in the previous year.

REGISTRATION.

Effect of Land Alienation Act.

20. The Registration Report this year is a triennial one. For some time to come the effect produced by the Land Alienation Act must form the most important question for consideration in this connection; and it is found that a much more rapid recovery than was anticipated is taking place both as regards the business and as regards the gross receipts of the department.

LOCAL SELF-GOVERNMENT.

Local Boards and Municipalities.

21. The general working of the District Boards has been satisfactory. The use of the Local Boards as consultative bodies has been recognized; and it is satisfactory to note the success of some of the Sanitary Sub-Committees. The apathetic attitude, however, of both candidates and voters towards the elections continues to be maintained, and there is no doubt that nomination is preferred to election. During the year Government framed important rules for the local audit of Local Fund Accounts. The working of the Municipal Committees was generally good; and Sub-Committees were found to be useful. Local self-government will no doubt benefit from the light thrown upon its working by the newly instituted Local Fund audit; but probably the thing most to be desired at the present time is a greater display of interest on the part of members in schemes of sanitation and in similar measures for the public welfare, and a greater absence of party feeling.

AGRICULTURE, WEATHER AND CROPS.

Harvests of the year.

22. Climatic conditions during the early months of 1904 tended to restrict cultivation for the staple autumn crops, and the monsoon must be considered to have been uneven and unfavourable for the Province as a whole, the Central, West and South-West Punjab suffering most severely. The dis-

tricts of the South-Eastern Punjab, however, did well after a succession of bad harvests. The winter rains were ideal; and, taking the province as a whole, the result was an 18-anna spring crop in spite of abnormally severe frosts. Reference has already been made to the effect of plague on labour; but, though the pestilence continued to affect agricultural operations throughout the Province, its effects were not so severely felt this year in the new Jhelum Colony. Perhaps the most noticeable feature of the year is the steady expansion in the area under cotton. The area irrigated from wells has very largely increased.

Agricultural stock.

23. The Civil Veterinary Department was separated last year from the Army Remount Department, and consequently the attention of the former department this year has been occupied in the main with operations among bovines. Additions have been made to the staff; good progress has been made in inoculation work; and a scheme for bull-breeding at Sargodha is under consideration. The earthquake of April 4th, 1905, caused very heavy losses in cattle and in agricultural homesteads in the Kángra District.

Agricultural improvement.

24. Extensive experiments with wheat and cotton have been carried out on the Lyallpur and Sargodha Experimental Farms, and the results have been generally satisfactory; while success has also attended the agricultural shows held at Ferozepore and Lyallpur.

Horticulture.

25. Young fruit-trees have been widely distributed during the year throughout the Province. It seems, however, that the success of such experiments must depend entirely on the localities in which they are planted.

Co-operative Credit Societies.

26. Encouraging reports are received of the working of the five young societies now in existence in the Miánwáli District. One district in each of the five Divisions has been selected for the trial of experiments in this direction; but Co-operative Credit Societies in the Punjab are still in their infancy, and it yet remains to be seen whether the people will attain to a speedy comprehension of the benefits derivable from such associations.

FORESTS.

Forest management.

27. During the year the area of both Reserved and Protected Forests underwent decreases, some 70,000 acres of the former having been disforested in Shahpur Division for colonization and canal purposes; while over 3,000 acres were added to Unclassed Forests. There are now 9,204 square miles of forests under the Forest Department. The Sháhdara Plantation in Lahore has benefited by an addition of 3 acres; and in Montgomery 15 square miles of Unclassed Forests have been declared Reserved Forests. Good progress has been made with forest settlements, demarcation of boundaries, surveys and working-plans. The number of forest offences during the year were nearly one thousand in excess of the average of the three preceding years. Adequate punishments were awarded by the Courts; and the tendency to compound is growing. There has been a great decrease in the number of forest fires. Compared with last year's figures there has been a decrease of 500,000 cubic feet in the amount of timber removed from the forests, and an increase of more than 1,000,000 cubic feet in the amount of fuel. The decrease was principally attributable to Chamba. There was a general rise in prices of timber, and a net surplus revenue of nearly 9½ lakhs as against 7 lakhs in the preceding year.

TRADE.

Total imports and exports.

28. The total value of the trade of the Province during the year was £24,119,000 sterling; and the exports exceeded the imports by £754,000 sterling. The growing expansion of trade is shown by the increase in total value over last year's figures of 4¼ millions sterling. The import and export figures are the natural consequence of a good harvest and bumper crops, the *rabi* harvest of 1904 having been a record one for wheat. The importance of the port of Karáchi to the Punjab continues to increase year by year; and the surplus harvests sent down the Indus to that port have had a most noticeable effect on the export figures. The growing popularity of European cotton piece-goods is the feature most worthy of remark so far as the import trade is concerned.

Trans-Frontier Trade.

29. The year exhibits an increase in trade, both as regards imports and exports, with Afghánistán; a decrease in trade with Chinese Tibet; and decreases in weight, but increases in value, as regards Ladákh and Kashmir. There can be no doubt that the Tibet Mission and an exceptionally severe winter produced considerable effects on trans-frontier trade; while a powerful factor as regarded Ladákh trade was the increased duty on *charas*, which was imposed from the 1st April 1904. Encouraging signs are the increases under European piece-goods and Indian tea.

PUBLIC WORKS.

Increased expenditure on Public Works.

30. Favourable agricultural conditions combined with the absence of the commoner forms of disease which result from ill-nourishment make possible the greater development of the Province in matters of improvement, and conduce to an increased expenditure of money on matters of popular utility and public benefit. During the year 22½ lakhs, apart from repairs, were expended on Provincial Civil Works, as against 23 lakhs last year and as little as 7 lakhs in 1900-01. All departments, protective, administrative and educative, shared in this outlay; and special attention was paid to roads and communications in the new colonies and to the improvement and sanitation of Simla. No famine relief works were required. The Victoria Jubilee Hospital at Amritsar was completed and opened; and good progress was made in the new civil stations of Sargodha and Campbellpur.

IRRIGATION.

Irrigated area. Triple Canal Project.

31. The total area irrigated by all the Punjab Canals, Imperial, Provincial and Native States, though less by some 84,000 acres than the area irrigated last year, exhibits a substantial increase over the average of the preceding three years. All the perennial canals show increases of irrigated area; that of the Western Jumna being the second highest yet recorded; that of the Bári Doáb forming a new record; while the figures of the Lower Chenab Canal (2,005,039 acres) show a progress nothing short of remarkable. The year was not a very favourable one for the Inundation Canals owing to the failure of river-supply and the prevalence of plague. In January 1905 the sanction of the Secretary of State for India to the Triple Canal Project Estimate was received and survey work in connection with this project formed the subject for expenditure during the year.

Income from canals.

32. The capital outlay on the canals classed as Major Productive Works amounts to £7,252,556 sterling, on which interest at 12·29 per cent. was earned as the net result of the year's working after deducting expenditure from income. Last year the percentage figure was 12. The Sidhnai (25·88) and Lower Chenab (24·48) were the best paying canals during the present year; while all canals except the Sirhind, and Upper Chenab and Upper Jhelum which are under construction, earned over 7 per cent. Minor Irrigation Works, owing to the causes already mentioned, had the low percentage of 0·01 as against 6·70 last year.

REVENUE AND FINANCE.

Total revenue and expenditure of the Punjab.

33. There were increases in receipts from all sources except Salt, Stamps and Interest. The most important decrease is that of 4 lakhs under Salt; this falling off being mainly due to the reduction in the duty which took effect from the 22nd March 1905. Sales, however, were dull for some time before the Budget Statement was announced, as traders had anticipated the further reduction made in the duty. There were important increases of revenue under the following heads of income:—Land Revenue, 12 lakhs; Irrigation, 7½ lakhs; Income Tax, 3½ lakhs; and Local Rates, 2½ lakhs. The total income amounted to 691 lakhs of rupees as compared with 665 lakhs last year; and in order to account for the satisfactory state of the Provincial finances the same explanation must be advanced as was put forward last year, namely, the favourable character of agricultural conditions, the extension of canal irrigation, and the revision of settlements. The expenditure, excluding expenditure on the Military, Railways, Post Office, Telegraph and Municipal, and Capital expenditure on canals increased by only 3 lakhs and amounted to nearly 374 lakhs. There was an increase of 7 lakhs under Irrigation; of 2 lakhs under Land Revenue, due to Settlement operations; of 2 lakhs under Education; and of 1 lakh under General Administration. Decreases occurred under Public Works (3 lakhs), Forests and Salt. The balance at the credit of the Provincial Government at the close of last year stood at 32 lakhs, and this balance has now been increased to 80 lakhs owing to an initial assignment by the Government of India of 50 lakhs in connection with the new Provincial Settlement.

Local Funds and Municipal Revenues.

34. Good harvests, which led to the recovery in full of current demands and to the payment of arrears, have benefited local finances, this year's closing balances exhibiting an increase of 2 lakhs over last year's figures; while the income has increased by nearly 2 lakhs, and the expenditure by less than a lakh. Many District Boards have been able to pay arrear contributions due to Government; and satisfactory items of expenditure may be considered to be those incurred on account of Education, Science and Civil Works in the newly-created district of Lyallpur. Municipal finances may also be said to be in a thriving condition. The total income has increased by over 2 lakhs, while there has been very little increase in expenditure; and the aggregated closing balances show an increase of a lakh and a half. The provincialization of certain schools caused a loss of income from fees and a reduction in Government grants; but on the other side of the account there is a larger income from cattle-pounds and from the sale of water. Improvements in Municipal lighting and on education formed items of expenditure which cannot be regretted; and the same

remark must be made as regards miscellaneous expenditure in connection with the opening ceremonies of the Water-Works and the Victoria Jubilee Hospital at Amritsar, two valuable institutions which cannot fail to benefit the health and convenience of the public.

VITAL STATISTICS.

Births and Deaths.

35. As was mentioned in last year's report, the year 1903 stood out for its extreme unhealthiness. Had it not been for plague, the year 1904 might have been equally conspicuous for its healthiness. There were far fewer deaths from fevers, the rate (18·82 *per mille*) being about equal to that of the healthy years 1895 to 1899; while there was also a decline in deaths from the commoner forms of disease. The total mortality from cholera was 716 only. Notwithstanding these favourable conditions, however, the death-rate actually rose from 49·0 to 49·06 *per mille*, while the birth-rate fell from 42·9 to 41·5 *per mille*. The birth-rate, while lower than that of the previous year, is practically the same at the mean average of the preceding five years, which included the bad years 1900 and 1901. Plague and the unusual autumnal sickness of 1903 are no doubt responsible for the present low birth-rate; but the result is that the percentage of births in the Punjab ranks lower than that of the Central Provinces, the United Provinces and Bengal. The health of Municipal towns was greatly improved by the absence this year of mortality from fevers.

Plague.

36. The appalling ravages of plague are shown by the fact that two-fifths of the total death-rate of the year for the Province were due to the pestilence; the percentage of deaths from plague being 19·7 per *mille*, while the Municipal death-rate from this disease increased by 5·05. Epidemics occurred in 26 of the 29 districts of the Punjab; and there were outbreaks in 8 Native States. Kángra, Miánwáli and Muzaffargarh alone escaped; the districts of Ludhiána, Gurdáspur, Gujrát and Shahpur suffered severely; while in Gujránwála and Lahore Districts conditions were considerably improved. The attitude of the people towards inoculation remains apathetic, though statistics amply reveal the benefits resulting from the operation. Two encouraging facts appear in the midst of this dismal record of mortality, namely, that the four large towns of Delhi, Lahore, Amritsar and Multán held low percentages of deaths from plague, and that the plague returns for Municipal towns as a whole compare very favourably with those recorded in rural circles.

MEDICAL RELIEF.

Hospitals and Dispensaries.

37. The report this year is a triennial one, and the statistics shown therein are decidedly encouraging. The number of dispensaries is increasing, and the attendance of in-patients and out-patients is steadily increasing also. Excellent work has been done at the Jullundur, Lahore and Simla hospitals, especially with respect to operations for cataract and for calculus. The increasing attendance of women and children at the general dispensaries is a good sign. The financial condition of hospitals and dispensaries is satisfactory, and good progress is being made in medical training. The Pasteur Institute at Kasauli treated 612 cases (European and Native) during the year, with only 5 failures.

Vaccination.

38. The report this year deals with a triennial period. There was very little mortality from small-pox during the year, but the number of vaccinations increased largely over last year's figures. The increase in the number of re-vaccinations is the most noticeable feature of the triennial figures.

SANITATION.

Sanitation in towns.

39. There has been no decrease in the energy displayed in formulating and progressing with sanitary projects throughout the Province. Due attention has been paid to schemes for water-supply and sanitation in all the larger towns, and the Amritsar Water-Works were opened during the year.

EDUCATION.

General progress.

40. The total expenditure on education in British Punjab was Rs. 41,06,320, an increase of nearly 2 lakhs over the figures of last year. Of this total, no less than 14 lakhs were contributed by the Provincial Government, while 9½ lakhs were obtained from fees. Primary Schools again shared largely in the expenditure, to meet which Public Funds contributed over 5 lakhs of rupees. As a proof of the energy which is being shown in furthering the wishes of the Supreme Government in the matter of the spread of elementary education among the masses, it may be noted that the number of Primary Schools for boys has risen from 2,298 to 2,347, while 50,950 agriculturists are now reading in the Primary Schools. The quality of the teaching and the qualifications of the teachers are also improving. Another satisfactory feature in the year's progress is the increasing interest taken in favour of female education. Educated men are commencing to evince a strong desire to have their wives and daughters learn something more than the Vernacular Middle Course gives; the demand for schools is spreading; and, though the supply of teachers is still insufficient, it is hoped that the Normal School for Women will supply this want in the near future. A small decrease has occurred in the number of Secondary Schools, but the number of pupils has risen, except as regards the 53 Secondary Schools in Native States. The Training Institutions at Lahore, Delhi, Multán, Jullundur and Ráwalpindi have continued to do most useful work throughout the year; and the same may be said of the institutions where professional and technical learning is inculcated. There has been a decided increase in the number of legal and medical students, and 40 students from Burma were admitted to the Medical College. The Mayo School of Art and the Engineering Classes at the Punjab University continue to attract students; while the results of examinations have been satisfactory, and many passed students have now obtained posts carrying respectable salaries. The standard of education at the Punjab University maintains its high level, and at the twenty-fourth Convocation held on the 23rd December 1904 the number of graduates admitted to the various degrees was 178 as compared with 162 in the previous year. A considerable change has been made in the curriculum of the Aitchison Chiefs' College on the lines of the proposals of the Conference which took place at Ajmer, and each form has now the benefit of English teaching by Europeans. Early in the current year three Conferences on Commercial Education, Female Education, and Departmental work were held; and the matters discussed at them will form the subject of a report next year.

LITERATURE AND THE PRESS.

Press prosecutions. Literature and the Press.

41. During the year the proprietor and the printer of an Amritsar newspaper were prosecuted, convicted and sentenced for publishing a seditious article in connection with the Universities Bill. The number of publications from the Vernacular Press continues to increase. Two works of great merit are a History of Muhammadan Civilization and a work on the Rise and Development of the British Empire in India. Other interesting works include a Life of Her Majesty the late Queen-Empress and a Volume of Memoirs of the late Amír Abdur Rahmán of Kabul.

ARCHÆOLOGY.

Damage by the earthquake.

42. Among the widespread disasters caused by the earthquake of the 4th April 1905 must be noted the severe damage done to the historical fort in Kángra, and to several ancient temples and monuments in the Kángra District, as well as in Mandi and the Chamba State.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1. Physical Features of the Country, Area and Climate.

(See pages 1—12 of the report for the year 1901-02.)

2. Historical Summary.

(See pages 12—32 of the report for the year 1901-02.)

3. Form of Administration.

(See pages 32—35 of the report for the year 1901-02.)

4. Character of Land Tenures and System of Survey and Settlements.

(See pages 35—43 of the report for the year 1901-02 and the Punjab Settlement Manual.)

5. Civil Divisions of British Territory.

(See page 44 of the report for the year 1901-02.)

6. Details of the last Census—Tribes and Language.

(See pages 45—53 of the report for the year 1901-02.)

7. Changes in the Administration.

New Districts.

1. The constitution of the Attock District, which necessitated a re-arrangement of the Ráwalpindi and Jhelum Districts, and of the Ráwalpindi Division, took effect from the 1st April 1904, and the following brief notes will be of interest. The re-arrangement referred to resulted from the separation of the new Punjab from the Frontier; and the new Attock District, of which the ultimate head-quarters will be at Campbellpore, now consists of the four tahsíls of Attock, Fatahjang, Pindigheb and Talagang; the first three tahsíls having been from the 1st April 1904 excluded from the Ráwalpindi and the last from the Jhelum Districts. The result to the Ráwalpindi Division is that it now comprises the five districts of Gujrát, Shahpur, Jhelum and Ráwalpindi (under their altered conditions), and Attock. A new district has also been formed in the Chenab Colony area; the notification regarding it operating with effect from the 1st December 1904. The district of Lyallpur is divided into the three sub-districts of Lyallpur, Samundri and Toba Tek Singh; and their exclusion from the Jhang District causes that district for the future to comprise the sub-districts of Chiniot, Jhang and Shorkot, and necessitates the reconstitution of the Multán Division, which is now made up of the districts of Miánwáli, Lyallpur, Jhang, Multán, Muzaffargarh and Dera Gházi Khan. The three colony tahsíls of the new Lyallpur District are, in the opinion of the Financial Commissioner, prospering under the new *régime*.

Area, population and revenue of Punjab.

2. The area, population and land-revenue collection of the Punjab as now constituted are as follows:—

Area, square miles.	*Population.*	*Land revenue collection.*
		Rs.
96,704	20,306,252	2,63,92,574.

8. Relations with Tributary States and Frontier Affairs.

Political supervision.

3. The arrangements for the purposes of supervision of the Native States in the Punjab remain as they were at the time of the last report, Baháwalpur being included with the Phulkián States in the charge of a Political Agent. The States, with the exception of Chamba which is in the political charge of the Commissioner of Lahore, are arranged in four groups as follows:—I, the Phulkián States, comprising the States of Patiála, Jínd and Nábha, for which a separate Political Agent was appointed on the 16th January 1901, and in whose charge Baháwalpur is now included; II, the States of Kapúrthala, Mandi, Máler Kotla, Farídkot and Suket in the political charge of the Commissioner of Jullundur; III, the States of Sirmúr, Kalsia, Pataudi, Loháru and Dujána in the political charge of the Commissioner of Delhi; and IV, the States of Biláspur, Bashahr, Nálagarh, Keonthal and numerous other small States in the Simla Hills, which are in the charge of the Superintendent of Hill States, Simla. Generally speaking, the administration in all the States has proceeded smoothly during the year under report. Plague has been prevalent throughout many of the States; but the Chiefs themselves have enjoyed good health. Full information will be found in the report for 1901-02 as to the area, population, gross revenue and estimated Military forces, including Police, of each State, and the following brief notices are inserted concerning special events of importance in the history of particular States during the year.

PATIALA.

Area, 5,412 square miles; population, 1,596,692; gross revenue, Rs. 71,46,900; Army and Police, 5,533; race of Chief, Sidhu Ját; age of Chief, 13.

General progress.

4. The constitution of the Council of Regency has remained unchanged, and there is reason to hope that the relations between the members have been marked by increased mutual confidence. The balance in reserve in the Treasury has increased during the past year from 20 to 24½ lakhs; and several important projects have been executed by the Department of Public Works in the matter of roads, bridges, State offices, drainage and dispensaries; while a Municipal Committee was created in Patiála on October 1st, 1904. It is anticipated that Settlement operations will be finally concluded in October 1908.

Personal.

5. His Highness the Mahárája suffered no inconvenience from the treatment he underwent at the end of the previous year at the Pasteur Institute at Kasauli, and joined the Aitchison College on the 22nd October 1904. During the absence on three months' leave of Mr. A. C. Sells, His Highness' European Guardian and Tutor, his duties were carried on by Major C. H. James, I.M.S., Medical Adviser to the State.

NABHA.

Area, 928 square miles; population, 297,949; gross revenue, Rs. 14,71,304; Army and Police, 1,531; race of Chief, Sidhu Ját; age of Chief, 61.

Illness of Tikka Sahib.

6. During May and June of the year under report the Tikka Sáhib was seriously ill with enteric fever in Simla; but has happily recovered. Arrangements for the marriage of His Highness the Rája's only unmarried daughter with the Mahárái Rána of Dholpur were completed with a view to its taking place shortly after the end of the year under report.

BAHAWALPUR.

Area, 15,000 square miles; population, 720,877; gross revenue, Rs. 26,00,000; Army and Police, 1,451; race of Chief, Dáúdputra; age of Chief, 21.

Birth of heir.

7. The event of most interest to this State during the year was the birth of a son and heir to the Nawáb on the 29th September 1904. The Council which advises the Nawáb has lately been reconstituted. Operations for fixing a

permanent boundary of jurisdiction between the State and the British Districts of Montgomery and Multán have been in progress, but no report has yet been submitted to Government on the former. The agricultural year was an average one, and the State has a reserve balance of 26 lakhs.

KAPURTHALA.

Area, 630 squares miles; population, 314,351; gross revenue, Rs. 20,00,000; Army and Police, 1,531; race of Chief, Ahlúwália Sikh; age of Chief, 32.

8. His Highness the Rája was permitted to proceed to Europe in March for eight months in order to arrange for the education of his sons. Visit to Europe.

MANDI.

Area, 1,200 square miles; population, 174,045; gross revenue, Rs. 4,30,000; Army and Police, 691; race of Chief, Rájpút; age of Chief, 22; tribute Rs. 1,00,000.

9. Excluding the first instalment of the installation "nazarana," in order to pay which Government paper was sold, the income during 1904-05 exceeded the expenditure by Rs. 47,094, thus reversing the conditions of 1903-04, when the year closed with a deficit of Rs. 75,000. Progress.

MALER KOTLA.

Area, 167 square miles; population, 77,506; gross revenue, Rs. 5,47,127; Army and Police, 382; race of Chief, Sherwáni Afghán; age of Chief, 47.

10. Since the 1st February 1905, the Wali-ahd, Sáhibzáda Ahmad Alí Khán, has been permitted to exercise, subject only to the control of the Commissioner of the Jullundur Division, the powers formerly entrusted to the Superintendent; and has been granted the title of Regent. A son and heir was born to him in May 1904. During the year under report the income of the State exceeded the expenditure by over Rs. 56,000. Enhanced powers and birth of heir.

CHAMBA.

Area, 3,216 square miles; population, 127,834; gross revenue, Rs. 4,92,187; Army and Police, 419; age of Chief, 36; tribute, Rs. 5,000.

11. Rája Bhure Singh was formally installed on the *gaddi* by His Honour Sir Charles Rivaz on the 12th May 1904. Installation of Raja.

KALSIA.

Area, 168 square miles; population, 67,181; gross revenue, Rs. 2,03,260; Army and Police, 172; race of Chief, Ját; age of Chief, 22.

12. The Sardár is carrying on the administration with the aid of two Councillors under the direct control of the Commissioner, and is reported to have gained in strength and character during the past year. Council of Kalsia.

BILASPUR.

Area, 448 square miles; population, 90,873; gross revenue, Rs. 1,57,000; Army and Police, 198; race of Chief, Hindu Rájpút; age of Chief, 31; tribute, Rs. 8,000.

13. The Rája has continued to reside at Benáres, and the affairs of the State have been satisfactorily administered by Mían Amar Singh. Administrative.

LOHARU.

Area, 222 square miles; population, 15,229; gross revenue, Rs. 66,000; Army and Police, 98; race of Chief, Mughal, Muhammadan; age of Chief, 45.

14. The Nawáb's connection with the Máler Kotla State ceased in February, and he has taken up his residence at Loháru. Personal.

FRONTIER AFFAIRS.

Public Darbar.

15. During the year under report, the peace of the border has not been disturbed by big feuds or serious offences. The behaviour of the tribes has been good; and the new Chief of the Mazári tribe, Sardár Bahrám Khán, who has been granted the title of Nawáb, continues to follow the excellent example set by his venerable father, who died last year. His Honour the Lieutenant-Governor visited Fort Munro, and held a Public Darbár at Dera Gházi Khan, at which all the Biloch Chiefs were present.

9. Condition of the People.

Average prosperity.

16. Like last year, the year under report has been one of average prosperity, except for the increasing virulence of plague. The subject has been treated in detail in Chapter VI.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications:—

Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1903 to 30th September 1904.

General Report on the Operations of the Survey of India for the year ending 30th September 1904.

Annual Report on the Settlement Operations in the Punjab for the year ending 30th September 1904.

Report of the Operations of the Department of the Land Records and Agriculture, Punjab, for the year ending 30th September 1904.

Annual Report of the working of the Punjab Alienation of Land Act, XIII of 1900, for the year ending 30th September 1904.

Annual Reports for the Chenab, Jhelum and Chunián Colonies for the year ending 30th September 1904.

Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1904.]

10. Realization of the Land Revenue.

Fixed Land Revenue.

17. The land revenue demand is distributed under three heads—fixed, fluctuating and miscellaneous. During the year under report, nearly 202½ lakhs out of a total demand of 207 lakhs were collected on account of fixed land revenue—or a percentage of 97·7 as against 93·8 in the previous year. The lowest percentage recorded for any district is 84·6 in Shahpur, and it is accounted for by the uncertainty which prevailed as to the rabi suspensions which would be granted in the Jhelum Colony, which was ravaged with plague. Ninety-five per cent. of the demand was collected in Hissar, as against 34 per cent. last year; and as regards collections on account of previous years (which have more than doubled during the year under report), the most remarkable feature is the recovery of more than 2 lakhs in the Hissar District. Owing to the very favourable agricultural conditions which prevailed, collections were generally made with fair promptitude and but little difficulty. The difference of Rs. 60,304 in the fixed land revenue demand of the present year as compared with last year is due to a total increase of Rs. 1,40,128 and a total decrease of Rs. 79,824; the only large item on the increase side being due to reassessment in the Sirsa Tahsíl of the Hissar District. The decreases in Shahpur and Miánwáli are due to the introduction in certain places of the system of a fluctuating assessment. The balances of fixed land revenue for preceding years now amount to nearly 18 lakhs as against 16½ lakhs last year; the amount under suspension showing an increase of 2 lakhs, due to large suspensions granted in 1902-03. The irrecoverable balance has increased by nearly 1½ lakh; this large increase being caused by remissions on account of wells which have gone out of use in two tahsíls of the Miánwáli District.

Suspensions and Remissions of Fixed Land Revenue.

18. It was only necessary to suspend some 3¾ lakhs this year; and these suspensions were mainly due to the failure of the winter rains and to plague. Under the orders which have been received for the remission of assigned revenue and service commutation money, which would have been remitted as famine arrears had they been *khálsa* revenue, nearly 2 lakhs have been remitted; and Government has sanctioned the proposal to compensate impecunious Jagírdárs for their consequent loss of income. A draft Bill, embodying certain modifications in Section 30 of the Tenancy Act (XVI of 1887), was forwarded to the Government of India with a view to obtaining sanction to its

introduction in the Punjab Legislative Council; and a proposal to further amend the Act by giving the Local Government power to suspend certain of its provisions in insecure tracts in times of distress is now under the consideration of the Financial Commissioner.

Fluctuating Land Revenue.

19. As was remarked in last year's report, one of the most prominent features of the Land Revenue Administration of the Province during the last few years has been the marked trend in favour of a fluctuating as opposed to a fixed form of assessment for irrigated or sailáb lands; and whether the fluctuating assessment will be popular or not must probably depend on whether the people (correctly or incorrectly) believe it to be pecuniarily advantageous or otherwise. On the whole it may be said that the system is becoming better appreciated throughout many districts of the Province in which the people recognize that with greatly varying harvests it is the only possible system. The system prevails in the Chenab and Jhelum Colonies; and experience shows that it discourages neither cultivation nor improvements, and that wherever it has been in force for any length of time, the people are generally in favour of it. The total fluctuating land revenue permanently excluded from the rent roll is now 36½ lakhs as against 28 lakhs last year; the largest increase occurring in Multán, where there were prolonged river floods and exceptionally good winter rains. The collections under the head of fluctuating assessment of canal-irrigated lands show a large increase of nearly 4 lakhs; the Chenab and Jhelum Colonies being chiefly responsible.

Miscellaneous Land Revenue.

20. The total collections under the heading "Miscellaneous Land Revenue" decreased by 3½ lakhs; the decrease being largely owing to the fact that there were no auction sales of land in the Jhelum Colony; by which sales during the last year as much as 4½ lakhs were realised. Balances on account of the year under report show a decided decrease, mainly due to the colonies. In Shahpur there are large arrears of *nazrána* from the grantees, and negotiations are to be opened with them for the voluntary transfer of the Sarfaráz Canal in liquidation of their debt. It has not been considered expedient to change the system pending legislation for the colonies, but it is probable that yearly assessments will ultimately take the place of the existing half-yearly assessments of ground rents on village sites.

Collection of Land Revenue.

21. It is satisfactory to note the very great decrease in the number of coercive processes for the collection of revenue. Cases of imprisonment, sale of immoveable property and direct management only total 29 altogether. Montgomery is the only district in which there has been an increase of both warrants and writs; and the fact that the number of the warrants is more than half that of the writs is explainable by the fact that there was a considerable collection of suspended arrears which the people looked on as likely to be remitted. The excellence of the agricultural conditions no doubt facilitated collection, but large arrears have also been recovered, and there is no doubt that as a general rule there should be very little necessity to resort to coercive processes, provided Zaildárs and lambardárs do their duty. Only in Multán and Amritsar do the numbers of warrants exceed those of the writs; and the reason has not yet been explained. The popularity of the system of paying land revenue by money-order is increasing.

11. Survey.

Survey of India Party No. 18 (Punjab).

22. The outturn of work by Survey of India Party No. 18 (Punjab) has again been very satisfactory, though want of an adequate staff has somewhat delayed operations. It is hoped that benefit will result from the investigations of the Survey Committee which has recently visited the Province; and meanwhile an extra assistant has been attached to the party; and the sanction of the Government of India has been obtained to the entertainment of a retired Survey Officer of the Provincial Service to supervise the fair drawing of the arrears of mapping. Good work was done in connection with the supplementary topographical survey in the Multán, Amritsar and

Ferozepore Districts, and in Bahâwalpur State, the area freshly surveyed being 3,090 square miles. Preliminary traverse work in the Multán and Muzaffargarh Districts covered an area of 3,441 square miles.

Simla Boundary Survey.

23. The protracted work of mapping all the estate boundaries in Simla on the scale of 50 feet to 1 inch was at last completed by the survey of the new railway line and its boundaries; and the revision of the 17 sheets in which it falls, and the whole of the 112 fair sheets, with index sheets, etc., were completed and sent to press during the year. Other work in connection with the proposed extension of Simla was carried out.

Riverain Surveys and Boundary Demarcation.

24. The various practical difficulties which have arisen in carrying out the work of riverain surveys were fully discussed in Simla. Various riverain traverses were carried out over extensive reaches of the rivers Indus, Panjnad, Sutlej, Beás and Jhelum; and riverain plane-tabling over an area of 1,705 square miles on the first three of these rivers. The demarcation of the boundary between the Montgomery District and the Bahâwalpur State is nearing completion; and the final approval of Government has been conveyed to the settlement of a fixed boundary between the Jammu State and the Gujrát District. No reply has yet been received to the reference made to the Government of the United Provinces on the proposal to lay a fixed boundary along the river Jumna between the Punjab and United Provinces. In addition to the operations referred to above, fixed boundaries were being laid down during the year on parts of the Chenáb and Rávi rivers.

12. Settlements.

Progress of operations in the Punjab.

25. Good progress has been made generally during the year; and it is expected that March 1906 and March 1907 respectively will see the termination of the Jhang and Ráwalpindi Settlements. Measures are to be taken to supply the deficiency of trained staff in connection with the Gurgaon Settlement. The *killábandi* system (the essence of which is the demarcation of small squares which serve as units for assessment purposes and thus enable every peasant to be clear as to his own liability under a fluctuating demand) has been carried out over the whole canal commanded area in Shahpur District, and is expected to be shortly completed over the portion of the colony included in Tahsíls Chiniot and Jhang. It is considered that the *killábandi* system will be of use where any assessment—the canal occupiers' rate included—fluctuates with the area irrigated or cultivated, since it forms a permanent survey. The system is inapplicable where physical conditions do not admit of the squares being laid, and is not suited to tracts under fixed assessment where property is much sub-divided and the value of land is high. One of its advantages is that no amendments of the map will be required at quadrennial attestations. The Miánwáli Settlement operations are considered to be progressing favourably, and the Ambála and Rohtak Settlements are to commence shortly.

Dera Ismail Khan re-settlement.

26. It has been realized that the re-settlement of the enormous area included in the old Dera Ismail Khan District is likely to take longer than the four years originally anticipated; and a similar first estimate for the duration of the Hazára Settlement appears also to have been over-sanguine. In the former case great improvements have been effected in the hill-stream irrigation, by which 200,000 acres of waste land have become culturable. Both these settlements, although in the North-West Frontier Province, continued to be controlled during the year under report by the Settlement Commissioner of the Punjab.

13. Land Records.

Patwari and Kanungo Agency and Land Record establishments.

27. A full account of the Patwári and Kánúngo Agency was given at pages 71—75 of the report for the year 1901-02. The marked increase which has occurred since 1900 in the proportion of the total number of Patwáris who have satisfied an educational test such as the Middle School or Entrance Examination is highly satisfactory. It is considered clear that a sufficient number of candidates who have fulfilled such a test are forthcoming to fill all

vacancies, and that the number of accepted candidates may well be reduced so as to include only those so qualified. In regard to the reservation of posts of *siah navís* and *wásil báqi navís* for Patwárís, the decision has been accepted that a strict interpretation of paragraph 7 of Revised Revenue Circular No. 29 should sufficiently provide for fair chances of selection being offered to this class of candidate. The income of the Patwár Fund amounted to well over a lakh above the expenditure, receipts being higher than in previous years on account of realisations of suspended revenue and the inclusion of the Chenáb and Jhelum Colonies. The contribution, however, for the Field Kánúngo establishment has not yet been debited. The fund has been included in the peripatetic system of audit which has just been started for the local funds of the Province. The list of promotions of Kánúngos is satisfactory.

Destruction of Kangra records by fire.

28. A disastrous fire in Kángra resulted in the destruction of the record-room at Dharmsála with most of the Kángra records. Duplicates of the Patwárís' copies of the maps and records are being made. Mutations of title have very greatly increased even over the high figures of last year; and plague is given as the main reason. Special attention has been directed to the working of the Alienation of Land Act, as also to the Financial Commissioner's Circular No. 2 of 1903 regarding the treatment of the rights of absentees in mutation proceedings. The register of di-alluvion villages maintained by District and Office Kánúngos has been abolished, as it served no useful purpose.

14. Waste Lands and Government Estates.

Government Canal Colonies.

29. Special interest must for some time to come attach to the development and progress of the Chenáb, Jhelum and Chunián Colonies, which form the subject of a separate annual report, and the two first of which colonies are specially administered by specially selected officers under the supervision of the Settlement Commissioner. All three colonies are subject to the provisions of the Government Tenants Act (Punjab), III of 1893. The revised draft Bill (referred to in last year's report) which aims at remedying the important practical defects of the existing Act is still under discussion.

Chenab Colony.

30. The progress of colonization in the Chenáb Colony has been well maintained throughout the year. The success met with in applying mule-breeding conditions to grants of land held by lambardárs is satisfactory, as also is the fact that the new *kharába* rules are working equitably. Good progress has also been made with the preparation of records-of-rights. A reference has been made to the Government of India regarding the formation of irrigated plantations in the new colonies on the model of that existing at Chánga Mánga. The question of communications, both by rail and road, is recognized as being one of the utmost importance, and it is hoped that more rapid progress will be made with the metalling of the main roads. The year under report has witnessed a change of Colonization Officers. The allotted area has increased by more than 35,000 acres; and the area sown by no less than 266,294 acres. The sown area has now probably reached high water mark for some time to come. The construction of a railway line from Shahdára to Sángla has received sanction. As a means of disseminating useful ideas among the people, it is intended to hold an annual Agricultural Show; and the first was held during the year under report,—one of the most striking features of the Show being the success attained by the *Janglís* (or aborigines) with their exhibits. A separate district has now been formed at Lyallpur consisting of the three colony tahsíls of Lyallpur, Toba Tek Singh and Samundri, with a sub-tahsíl in the last-named at Jaranwála, this new district being one of the five selected by the Director of Land Records in which to push the improvement of the cotton staple.

Jhelum Colony.

31. In the Jhelum Colony the peasant-colonists who are to receive land on horse-breeding terms have all been selected, but it has not yet been possible to give grants to all of them or to carry out the exchanges involved by the extension of holdings from one and-a-half to two squares; but it is reassuring to learn that the officers of the Remount Department are satisfied with the class of colonists selected as horse-breeders. As in the case of the Chenáb

Colony, a proposal to establish an irrigated forest reserve is at present before Government; while the seed farm near Sargodha will benefit the colonists by enabling them to secure selected seed. The advantages accruing from the *killábandi* system have already been referred to. Besides his recently-acquired merits as an exhibitor at Agricultural Shows, the *Jangli* possesses the great recommendation of permanently residing on his grant, and thus compares very favourably with the Civil Reward Grantee, whose main idea appears to the Colonization Officer to be to obtain land near some Railway Station with a convenient train-service away from his holding to the city of his birth. Of ten Regimental Horse Runs, eight have been given out, and all these are under cultivation; while most of the regiments have begun to build paddocks and quarters on their grants. The Colonization Officer happily recovered from his attack of plague; but by the death of the Assistant Colonization Officer from the same cause the colony lost a capable and experienced official. The total area allotted during the year under report was 147,894 acres, leaving an unallotted balance of 29,477 acres.

Chunian Colony.

32. The development of the Chunián Colony under the control of the Deputy Commissioner of Lahore has continued to be satisfactory; and the more important part of the work is expected to be completed during the current year. The area allotted permanently during the year amounted to 11,536 acres, bringing the gross allotted area to 46,243 acres. Land hunger is reported to be very severe in the district. The estates colonized this year were 15 in number.

Other Government waste.

33. As regards other large areas of Government waste, it may be noted that a proposal to commence at once the square survey of a large area in the Montgomery District is under consideration. The total area of unclassed forests and waste lands under the control of Deputy Commissioners has this year decreased by more than 16,000 acres, the decrease being partly accounted for by the resumption of the Karnal Remount Depôt by the Military Department, and partly by allotment in the Jhelum Colony. It is satisfactory to note that improvements are considered to be resulting from the working of the Punjab Land Preservation (Chós) Act, 1900, though a difficulty has arisen with regard to the wording of Section 5 (*c*) of the Act. Orders were issued during the year for the drafting of an amended Bill, with a view to stopping the removal of grass for sale, while allowing its removal "for *bonâ fide* domestic purposes." The Bill has since been passed. The *tirni* system of the Montgomery District was somewhat dislocated by the exemption of grantee camels and of Sillahdári camels during their period of service at head-quarters from liability to pay *tirni*. New rules for the enumeration of both classes south of the Ravi and for the assessment of the latter class when not at head-quarters have been approved by Government, the principle adopted being that the assessment on *Sillahdári* camels should be collected and paid into the treasury by the Corps Commandants themselves.

15. Wards Estates.

Punjab Court of Wards Act, II of 1903.

34. There are no special features this year calling for remark under this section. There are now 39 estates as against 44 reported last year. It is realised that there must always be an element of risk in handing over a large cash balance to a ward on his release; and the problem of how best to invest cash balances still awaits solution. The opportunities of investment in landed property are very limited, and the experiment of Co-operative Credit Societies and Agricultural Banks is still in too rudimentary a stage to be of much real assistance in solving the problem. At present the best arrangement appears to be the investment of the funds in Government paper.

16. Revenue and Rent-paying Classes.

Alienation of Land Act, XIII of 1900.

35. As regards the Alienation of Land Act, XIII of 1900, it is satisfactory to find that the Act appears now to be generally well understood, and that its working appears to add but little to the volume of current district work.

One proof of the better understanding of the Act is the ingenious character of the attempted evasions of the provisions governing temporary alienations—which attempted evasions, however, are not very numerous. An item of importance in connection with this Act is the ruling of the Chief Court that land as defined in the Act includes occupancy rights in land. Pending any amendment to either Act, Section 53 of the Tenancy Act must in practice be treated as modified by this decision in any case in which the landlord is not a member of an agricultural tribe or an agriculturist. There appears to be no general tendency to evade the law by the subterfuge of a pretended charitable gift; and it is considered that the contraction of credit that has resulted from the working of the Act is neither extensive nor altogether regrettable, since it seems probable that if the establishment of co-operative banks ultimately succeeds so far as to supply the place of the *bania*, the latter will gradually learn that his money can be profitably invested in commercial undertakings. It is significant that the process of recovery in the price of land towards the figures that prevailed before 1900 has continued during the present year. So far as statistics show, it appears probable that while the Act has been effective in stopping sales, greater resort is now being had to mortgage; and another noteworthy fact is that the great bulk of alienations is inter-tribal.

Descent of Jagirs Act, No. IV Punjab of 1900.

36. Another instance of the length of time which must elapse in this country before the good intentions of any piece of legislation are properly appreciated is afforded by the reception with which the Descent of Jágírs Act, No. IV Punjab of 1900, is meeting in certain portions of the Province. The object of this Act is to arrest the sub-division of jágír tenures, and to substitute legal order for vague and indeterminate custom. However, in spite of the fact that jágírdárs by coming under the Act derive the advantage that their assignments cannot be attached by order of a Court in satisfaction of a decree, it seems that the Ambála Sardárs still continue to maintain towards the Act their former attitude of suspicion; and that the spirit of opposition has spread to the Karnál District; while the Jullundur jágírdárs are also suspicious. It is hoped that the grant of adoption *sanads* to certain selected jágírdárs who have accepted the rule of primogeniture will show that the Act is meant to benefit this class, and that the present feeling of suspicion regarding the intentions of Government may pass away.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports :—

Police.—Report on the Police Administration of the Punjab for the year 1904.

Report on the working of the Criminal Tribes Act for the year 1904.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1904.

Prisons.—Report on the Administration of the Jails in the Punjab, 1904.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1904.

Registration.—Note on the Registration Returns of the Punjab for the year 1904.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1904-05.

Local Boards Administration.—Report on the working of the Local Boards in the Punjab during the year 1904-05.

And in the following tables of the Volume of Judicial and Administrative Statistics of British India, Ninth Issue, 1905. *viz.*, Police (Tables VII), Criminal Justice (Tables IV), Jails (Tables V), Civil Justice (Tables III), Registration (Tables IX) and Municipalities (Tables XVII).]

17. Legislating Authority.

(See pages 83 and 84 of the report for the year 1901-02.)

18. Course of Legislation.

37. During the year 1904-05 five meetings of the Punjab Legislative Council were held. **Meetings of Punjab Council.**

38. The following Bills were introduced in Council :— **Pending Bills.**

(1) Bill to amend certain sections of the Punjab District Boards Act of 1883 and the Punjab Municipal Act of 1891.

(2) Bill to amend the law relating to pre-emption in the Punjab.

39. The following Bills which were passed in Council during the year 1904-05, received the assent of the Governor-General on the dates noted against them :— **Acts.**

(1)	Punjab Loans Limitation Bill (Punjab Act I of 1904).	Received the assent of the Governor-General on 1st June 1904.
(2)	Bill to amend Sind Ságar Doáb Colonization Act, 1902 (Punjab Act II of 1904).	Ditto ditto.
(3)	Bill to amend certain sections of the Punjab District Boards Act of 1883 and the Punjab Municipal Act of 1891 (Punjab Act I of 1905).	Received the assent of the Governor-General on 22nd December 1904.
(4)	Bill to amend the law relating to pre-emption in the Punjab (Punjab Act II of 1905).	Received the assent of the Governor-General on 22nd April 1905.

(5) Punjab Minor Canals Bill (Punjab Act III of 1905). Received the assent of the Governor-General on 12th May 1905.

Members of Punjab Council.

40. The following changes took place amongst the Hon'ble Members during the period under report :—

(1) The seat of the Hon'ble Mr. Alexander Anderson, C.I.E., became vacant owing to the expiry of his term of office on the 28th October 1904 and he was re-appointed.

(2) The Hon'ble Sir Lewis Tupper, K.C.I.E., was re-appointed on the 8th December 1904, *vice* the Hon'ble Lieutenant-Colonel J. A. L. Montgomery, resigned.

(3) The Hon'ble Colonel J. B. Hutchinson, C.S.I., resigned his seat.

19. Police.

Indian Police Commission.

41. Since the issue of last year's police administration report orders have been passed by the Government of India on the recommendations of the Indian Police Commission. These orders contemplate changes which will not only affect the pay and organization of the provincial police force, but will involve a material revision of the existing rules regulating its internal discipline and its methods of working. The pay of all ranks of the establishment will be increased. Large additions will be made to the numbers of Inspectors and station-house officers, and a regular provincial service of Deputy Superintendents will be instituted. Deputy Inspectors will for the future be mainly recruited by direct appointment. A special reserve will be constituted in each district ; the operations of the railway police will be confined to lines actually within the province ; and a provincial criminal investigation department will be established. The existing statistical forms and returns will be amended, and in many cases abolished. Municipal and Cantonment police will be more completely provincialized ; and attempts will be made to make a fuller use of the machinery of the village community in the repression and detection of crime. Greater discretion will be given to station-house officers with regard to optional investigation ; they will be directed to resort far more fully to the practice of giving bail in cognizable cases ; the 'beat' method of surveillance will be abolished, and the system of village crime registers more fully developed. These changes will involve very considerable alterations in the provincial Police Manual, and a new Police Bill, providing for the many alterations of system contemplated, has already been prepared. It will of course be a work of some time to give full effect to these changes, but Government has under consideration proposals for an immediate increase in the pay of constables (who will in the future be subject to no deduction for kit), for the strengthening of the reserve in each district, the promotion of a large number of Head Constables to the rank of Sub-Inspector, the increase in the number of Inspectors, and finally for the improvement in the pay and prospects of certain of the gazetted ranks. It is also proposed to take steps for the creation of a third range under a Deputy Inspector-General, and for the appointment of a fourth Deputy Inspector-General, as head of the criminal investigation department, for the subordinate establishment of which provision will also be made.

Condition of crime.

42. It is a matter for regret that the number of complaints made directly to Magistrates taken over a series of years show no tendency to a progressive decrease. Statistics still appear to show that most of the true cognizable crime is brought to notice through the Police, and that a very great number of the complaints to Magistrates are altogether baseless, and are brought from motives of enmity and litigiousness. It must be remembered, however, that in Magistrates' cases a very large number are compounded. During the year the complaints of

all kinds made to the Police amounted to 49,030. Crimes in which the public safety is most concerned are those of murder, rioting, dakaiti, wrongful restraint and theft; and the manner in which these cases are dealt with forms the best test of the efficiency of the Police as a detective agency. In respect of these cases this year's percentage of convictions to trials is 68 as against 69 of last year. The year now under review was marked by even more favourable agricultural conditions than its predecessor, but, on the other hand, plague raged with a virulence it had never previously exhibited. The report affords evidence that in some of the districts of the Northern Punjab a good deal of crime could be traced to the direct influence of plague, though it does not seem to have had the same effect in districts where the epidemic was of older standing. Thus, though serious crime was on the whole less than in the previous year, it did not show the decrease which might have been expected in a period marked by such favourable economic conditions. On the whole cases of riot, dakaiti, robbery, burglary and minor offences against property decreased, but there was a regrettable increase in the number of cases of murder and of grievous hurt. There was a satisfactory improvement in the detection and conviction of coiners, while convictions were obtained in murder cases in about the same proportion as last year. About 17 per cent. of these cases were attributed to poison, and it is hoped that Rules under the Poisons Act will be introduced before next year.

Preventive measures.

43. It may be hoped that the reorganization of the Police Force will tend to secure a considerable improvement in the detection, and therefore prevention, of crime; but so long as the attitude of the people towards questions of public justice remains unchanged, the machinery for the detection and punishment of crime must continue to work under enormous difficulties. It is in circumstances of this nature that deterrent measures assume an importance equal to those of which the chief aim is the detection of crime. Among deterrent measures a foremost place must be given to those which seek to enforce the communal responsibility for crime; and it may be noted that the Local Government has again taken into consideration the advisability of amending the existing law in order to provide regulations regarding village responsibility similar to those obtaining in the Frontier Province. Other deterrent measures are the establishment of punitive posts (of which eight new posts were established during the year, while twelve have been continued for further periods), and the awarding of suitable sentences to habitual offenders. It would appear that of the total number of persons convicted no less than 11 per cent. had been previously punished; and the attention bestowed by the Chief Court on this question is already bearing excellent results. The necessity of utilizing to the full the security and surveillance sections of the Code is apparent; and the increased attention which will now be paid to village crime note-books should render possible the more systematic working of these sections. It is very satisfactory to note the assistance given by the Police of Native States to the Police of British districts; while the increasing readiness of Native States to send their Police Officers for training to our school is also a matter for congratulation. The figures relating to the Training School and the Criminal Identification Bureau are encouraging, as is also the decrease in the number of dismissals and judicial punishments on members of the force.

RURAL POLICE.

Rural Police.

44. This subject was treated of on pages 88 and 89 of the report for the year 1901-02.

CRIMINAL TRIBES.

Criminal Tribes.

45. It is satisfactory to learn that registration is now complete in all districts except Jhang and Lyallpur, with the result that the total number of persons registered under the Act has increased from 17,436 to 19,254. The number of absentees, though somewhat less than last year, is still high, being slightly over 6 per cent. of the number of persons registered, and it is clear that a very considerable margin for untraced crime on the part of these tribes exists in the 1,167 persons whose present whereabouts are unknown. It is stated

that the importance of checking absenteeism has been the subject of greater attention during the year, and 169 of the absentees have been proclaimed under Section 87 of the Criminal Procedure Code. An examination of the district figures, however, discloses the fact that activity in this direction is mainly confined to the two districts of Ludhiána and Hissar, in both of which every absentee has been proclaimed. Notwithstanding the increase in registrations, however, the number of registered persons convicted under the Indian Penal Code has fallen from 135 to 85, and it has been found possible to give large increases in exemptions to men of good character, with the result that nearly 30 per cent. of the persons registered have been exempted. Of the eleven tribes which have been proclaimed, the Harnís appear to be the best behaved, while the Sánsís and Karnál Bilochís have the worst record. The last-named in fact are reported to be quite incorrigible. The difficulty experienced in dealing with wandering tribes forms the subject of universal comment in the district reports, and it is clear that until these tribes can be brought under adequate supervision, the full value of the Criminal Tribes Act will never be attained. Proposals for obviating the present state of affairs have been submitted to the Government of India, and the Lieutenant-Governor hopes that it will be possible before long to deal with these tribes in a more effective manner than has been practicable hitherto. The record of work performed in taking finger impressions of registered persons during the year is very satisfactory, and, excluding absentees and certain residents of four districts in which this work was not quite complete by the end of the year, the finger impressions of all registered members of criminal tribes have been taken and are now on record. The value of this measure is brought into clear relief by the figures given in the report of the Phillaur Bureau, which shows that out of 1,154 persons traced by the Bureau 260 were found to be members of criminal and wandering tribes, of whom 223 had been previously convicted under the Indian Penal Code.

20. Criminal Justice.

General.

46. The criminal record of the Province for the year 1904 has already been considered in the foregoing section, which deals with the working of the Police Department, and, as the statistics of offences reported to and investigated by Police agency furnish a truer criterion of the actual state of crime than the figures of cases which come before the Courts and are necessarily inflated by innumerable complaints of a petty, false or frivolous character, there is no need to travel over the same ground again or to treat the judicial returns as a reliable index to the criminality of the population. The report this year contains many indications that the Courts are becoming more fully alive to their duty of dismissing frivolous complaints *in limine*, and the diminution in the number of unnecessary references to the Police is very satisfactory. The remarkable increase in the number of persons fined under Section 250, Criminal Procedure Code, for lodging false, frivolous or vexatious complaints is also encouraging, for it is the liberal use of the powers conferred by this section which furnishes the most potent weapon in the hands of the magistracy for dealing with the persistent and malicious litigant. The extended use of this particular check in the two districts, Siálkot and Gurdáspur, which are remarkable for the lowest percentages of convictions to complaints in the Province, is commendable, and, although it would be premature to gauge the precise effect of measures of this kind by the experience of a single year, the fact that both these districts exhibit an improvement in their percentage of convictions over the figures of 1903 may reasonably be regarded as due to something more than mere coincidence. The noticeable increase in the number of matrimonial offences, which forms the subject of comments in the Jullundur District, has been ascribed to the heavy female mortality from plague, which has enhanced the value of the surviving women. There has been a general steady rise throughout the Province in this class of offence since 1901; and considering the excess of female mortality from plague over that of males, it seems not improbable that the foregoing explanation may fairly be applied to the rise in this class of offence.

Chief Court.

47. The Chief Court in the exercise of its original jurisdiction tried two persons, both of whom were convicted. The number of appeals instituted during the year increased from 622 to 844, a higher figure than that recorded in any year since 1900. Disposals increased from 629 to 813, and 165 cases were left pending at the end of the year. There was also a considerable increase in the number of applications for revision, from 1,648 to 1,882. Of these, 1,645 were disposed of as against 1,438 in 1903, and the pending file rose by 27 cases only. Enhancement of sentences was recommended by the referring Court in 116 cases, or 26 more than in the previous year. In all, sentences were enhanced by the Chief Court in the cases of 119 persons, as against 58 in 1903, 42 in 1902, and 32 in 1901. In a large number of these cases, the Court had of its own motion issued notice to the persons convicted. The figures quoted prove that the Hon'ble Judges are devoting considerable care to checking any tendency they may observe towards undue leniency on the part of subordinate Courts.

21. Prisons.

General.

48. The year under report exhibits a further satisfactory decline in the number of prisoners of all classes admitted to jails and lock-ups in the Punjab, the total number of admissions being 2,500 less than last year, while the daily average population has fallen by more than 400. Statistics go to prove that this decrease is mainly due to better harvests and consequently easier conditions of life rather than to reform on the part of the criminal classes. The jails held accommodation for 13,514 prisoners of all classes; and only two escapes occurred during the year. Offences committed by convicts and punishments awarded have risen substantially; and the main reason appears to be the special attention paid to the exaction of full labour. The steady decrease in corporal punishments has been maintained. The enquiry into the alleged defects of the mark system has resulted only in the proposal to substitute days for marks; but, though the present system is admittedly defective, the fact that the Indian system approximates closely to that in force in England is a point in favour of maintaining it in its present form. The average cost per head of the jail population shows a rise from Rs. 63-7-3 to Rs. 64-13-3; the increase being mainly due to the lower average population during the year; while the average cash earning per head has risen from Rs. 9-14-0 to Rs. 10-5-0. A special feature of the jail industries in the Province is the improvement in the carpet-manufacture at the Montgomery Central Jail. The gross profits on manufactures during the year has risen by nearly Rs. 7,000. The abnormally low death-rate of 19·88 per thousand forms a valuable testimonial to the sanitary condition of the Punjab jails; and the deaths included only one from plague. Possibly the most important measure of reform which can be undertaken in the interests of both the jail and the criminal administration is the provision of cubicular accommodation for the segregation of habitual offenders; and the provision of 550 additional cubicles forms a creditable record for the year.

Juvenile offenders.

49. The decrease in the number of juveniles admitted during the year is satisfactory, but there still appears to be considerable room for improvement. The newly opened Reformatory School at Delhi has done something to modify the too numerous admissions of juveniles into jail, but it is clear from the fact that 85 youths were admitted to jail during the year that either the Courts are reluctant to make full use of the Reformatory, or that the rules regulating admission to that institution are drawn too tight. Proposals for remedying the defects in the Reformatory Rules are now under examination. It is satisfactory to note that an attempt is being made to introduce some of the features of the Borstal system into the Punjab as regards juvenile-adult prisoners; but, while the value of a reform, which saves the casual prisoner from actual contact with jail life, cannot but be appreciated, it appears that even more may be hoped from the existing law, provided the Courts accord intelligent and judicious treatment to first offenders.

Sentences of transportation.

50. The striking increase in the number of prisoners sentenced to transportation (207 to 350) combined with the rise in the percentage of habitual offenders (12 to 14 per cent.) to total admissions indicates greater attention paid by the judiciary to the importance of dealing adequately with this type of criminal. The suggestion put forward by the Inspector-General of Prisons, for the segregation of the most confirmed criminals in a separate jail, merits serious consideration; and when the proposed southern central jail has become an accomplished fact it may be possible to effect some material advance in this direction by a careful redistribution of the jail population; but meanwhile it must be recognized that an Indian jail affords but limited scope for the careful classification and separation which form an essential element in the English system.

22. Civil Justice.

Institutions.

51. The year under review has been marked by a further decrease in the number of suits instituted, the figures having fallen from 214,606 in 1903 to 210,145 in 1904. The decrease is entirely due to the fall in institutions of suits for the recovery of money or moveable property, and every other class of suit shows an increase. Plague and the extension of the period of limitation for suits for the recovery of money lent are put forward as the two main factors responsible for the decline, and the figures for the districts of Siálkot and Hoshiárpur, which have suffered heavily from plague, on the one hand and of Dera Gházi Khan, where no epidemic on any extensive scale has occurred, on the other furnish substantial evidence in favour of both theories. The fact that the money-lender appears to be taking advantage of the extended period of limitation now allowed and to be avoiding premature recourse to the Courts is *primâ facie* a satisfactory indication that the amendment of the law in question has attained the object with which it was framed, but it is too early to decide whether the drop in suits by suitors of this class against agriculturists is temporary and mainly due to this cause or to the alternative explanation that the disinclination of money-lenders to advance money to agriculturists is increasing. Among classes of suits other than those already referred to the main features of note are the increase in pre-emption suits and the substantial rise in matrimonial cases. A corresponding rise in offences relating to matrimony has already formed the subject of comment in the section of this report dealing with the administration of criminal justice, and it is possible that much of the civil litigation under this head is merely the sequel to unsuccessful attempts on the part of relations to obtain possession of women by the institution of criminal complaints against alleged abductors. The cause at work appears to be the same in both cases, *viz.*, the heavy mortality among females caused by plague and consequently keen competition for possession of the women who have survived. In the case of pre-emption suits the rise is clearly due to attempts to anticipate the amendment in the law of pre-emption.

Disposals.

52. There has been a satisfactory improvement in the number of cases disposed of by the Courts during the year, with the result that the pending file shows the substantial reduction of 7,866 cases. The average duration of contested cases has however risen from 50 to 52 days, the variation being ascribed to the difficulty experienced in securing the attendance of litigants owing to plague, the greater average value of the suits instituted, and the increase in the more difficult class of cases. The rise in the average value of suits instituted from Rs. 108-1-3 to Rs. 125-14-4 and the substantial decrease in petty money suits of a value of less than Rs. 50 are among the satisfactory features of the year's returns.

Chief Court.

53. Much needed relief has recently been afforded to the Chief Court by the appointment of four extra temporary Judges in order to clear off the accumulation of arrears and by the conversion of the fifth Judgeship into a permanent appointment. It is hoped that by the end of 1906 the outstanding file of the

Court will with this additional assistance have been reduced to comparatively reasonable dimensions. Mention may in this place be made of the sad and untimely death in the summer of 1904 of the Hon'ble Mr. J. A. Anderson, who had been a Judge of the Chief Court since 1898.

Appellate work and Judicial training.

54. In Courts other than the Chief Court the appellate work displays some variation. Owing to their time being more fully occupied in criminal work as a consequence of the orders passed by the Chief Court to ensure that habitual criminals are tried by Courts empowered to pass adequate sentences, Divisional Judges were unable to keep pace fully with the increase in institutions, and the pending file in these Courts rose by 608 cases. In District Courts on the other hand a marked improvement was observable, and a slight decrease in institutions was well met by a substantial reduction of the pending file and a satisfactory fall in the average duration of appeals from 37 to 30 days. While the average outturn of work performed by almost every class of Court exhibits an improvement over the previous year, it is satisfactory to find that this is specially the case with Officers of the grade of Assistant Commissioner, whose outturn has on the average nearly doubled. The somewhat abnormal circumstances of the year in the matter of leave rendered it difficult to spare many Assistants for purely judicial training under District Judges.

Execution of decrees.

55. The percentage of realizations in execution of decrees still exhibits the very low figure of 24 per cent., for, although the actual amounts realized during the year exceed those of 1903 by about $5\frac{1}{2}$ lakhs of rupees, there was a rise of nearly $17\frac{1}{2}$ lakhs in the total value of money decrees in execution. Enquiries made by the Judges in certain districts have tended to substantiate the theory that a considerable number of decrees are satisfied privately without the intervention of the Courts, and the estimate cautiously put forward on the figures available is that the proportion amounts to about one-fifth of the decrees in which no execution proceedings are taken. From this it follows that the percentage of realizations registered and appearing in the annual returns does not fairly represent the working of the Courts in the results of execution proceedings.

23. Registration.

General.

56. The business of the Department is now reviewed every three years, and the present Registration Report is a triennial one for the calendar years 1902, 1903, 1904. The most important questions dealt with are those connected with the effect produced by the Punjab Land Alienation Act, XIII of 1900. Business reached a minimum in the last year of the previous triennium, but it appears that the anticipation of a very slow and partial recovery must be somewhat modified, since from the figures for compulsory registrations (a rise from 55,451 to 58,813) it is evident that considerable lost ground has been recovered even since last year; while there is also a noticeable recovery in the gross receipts of the Department. As has been remarked in the section specially referring to the working of the Act, there is good reason to suppose that its provisions are becoming more generally understood and appreciated; and it is satisfactory to note that a recovery in business is taking place in spite of the prevalence of two conditions normally unfavourable to registration — widespread plague and general agricultural prosperity.

24. Local Boards Administration.

Constitution of District and Local Boards.

57. During the year under report the Local Boards of Ludhiána, Jagráon and Samrála were abolished. The District Board of Ludhiána was reconstructed. Sanction has now been accorded to the proposals for the reconstruction of the District Boards of Jhang and Lyallpur in consequence of

the formation of the new Lyallpur District. A District Board was constituted for the new district of Attock in January 1905. The number of *ex-officio* members of the Miánwáli Board has been increased by two.

Elections.

58. A general lack of interest in the elections is reported all over the province; and both candidates and voters appear to be equally apathetic. Generally speaking, appointment is considered more honourable than canvassing for votes, and certainly involves less trouble.

Meetings of District Boards.

59. The only Board which held monthly meetings was that of Siálkot. There were eight meetings in Miánwáli, and in most of the other districts the number ranged from five to seven; the average attendance in most Boards being about 50 per cent. The highest averages (above 60 per cent.) were those of Miánwáli, Siálkot, Amritsar, Hoshiárpur, Delhi and Montgomery; while the average was low in Dera Gházi Khan, Jhang, Gurgaon, Kángra and Ludhiána.

Working of District Boards.

60. The general working of the District Boards has been satisfactory. Members are reported to have taken interest in their work in Rohtak and Gurdáspur, and the use of the Local Boards as consultative bodies has been recognized in Siálkot. The success of the Sanitary Sub-Committees in Kángra and Jullundur is noticeable.

Rules.

61. The only important rules framed by Government during the year were those for the local audit of Local Fund Accounts and for the appointment, &c., of teachers in Secondary Board Schools. None of the rules framed by Boards require attention.

25. Municipal Administration.

New Municipalities established and old Municipalities abolished.

62. The town of Palampur was constituted a Notified Area.

Changes effected inth e system of appointing members.

63. The only change of importance was the disfranchisement of the Municipality of Ballabgarh in the Delhi District on account of the high party feeling between two rival factions in the town.

Election and appointment of new members.

64. Exclusive of the Delhi figures, which cannot be dealt with in this year's report, 228 elective vacancies occurred; and to fill these 93 contested elections were held. Exclusive of Jullundur, as to which information is not available, the percentage of voters who exercised their rights was 65·5. Keen interest in the elections is reported to have been displayed in Ludhiána, Amritsar, Jullundur and Gujrát; and on the whole there appears to have been less apathy over Municipal elections than there was over those of District Boards. The returns from the various Divisions appear to show that the elective system is best suited to the Central Punjab.

Meetings of Municipal Committees and attendance at meetings.

65. Plague is given as the explanation for the failure of a large number of Committees in the Delhi and Lahore Divisions to hold the prescribed number of meetings. In the case of the smaller Committees a monthly meeting is in many cases sufficient to dispose of the business on hand, and it is satisfactory to note that in so many cases this minimum was exceeded. The regularity of the meetings at Simla, Ambála and Delhi is very creditable. Attendance of members on the whole throughout the Province was very fair, but it is a matter for regret that this remark cannot be held to apply to the Municipal Commissioners of Multán, Muzaffargarh and Ferozepore.

General working of the Committee.

66. The newly instituted Local Fund audit will no doubt bring a powerful searchlight to bear upon many of the inner workings of local self-government; but speaking generally the working of the Committees is well reported on throughout the Province. The Amritsar Committee is especially commendable for its energy and absence of friction; and the working of the Lahore Committee has very creditably improved. The party feeling reported to exist in the Committees of Multán, Rohtak, Gohána, Máchhiwára and Pákpattan is a matter for regret; and the present state of the Bhera Municipality is reported to be so discreditable as to call for the abolition of the elective seats. Interference by superior authority has rarely been required, and only in matters of trivial importance. Sub-Committees are generally said to be useful, and apparently find more scope for their functions than do those of District Boards.

Rules framed by Government or by Committees.

67. Bye-laws regarding vaccine operations were framed by the Municipalities of Rohtak, Beri, Rewári, Ambála, Rupar, Jalálpur, Murree and Miánwáli. Other sanitary bye-laws were passed by the Committees of Delhi, Khanna, Ferozepore, Gujránwála, Jhelum and Murree. The compulsory registration of children's names has been adopted in most of the Municipalities of the Delhi Division, while rules for registration of births and deaths were made in Kálka, Gujrát, Jalálpur, Kunjah, Dinga and Jhelum. Several Committees also passed bye-laws for the regulation of traffic.

TAXATION.

Imposition of new and withdrawal of old taxes.

68. During the year under report octroi was imposed in the newly created Municipality of Miánwáli. There was no other fresh indirect taxation. House-taxes were imposed in Ambála (in substitution for the water-tax) and Gujrát, and in the Notified Areas of Gojra and Pálampur. Orders have now issued for the early submission of revised octroi schedules throughout the Province.

Total income from taxation.

69. The total income derived from rates and taxes in Municipalities and Notified Areas was Rs. 36,74,000, showing an increase of Rs. 2,30,000 on the figures of the previous year. Of this amount octroi accounts for Rs. 32,99,000, which was Rs. 2,55,000 in excess of last year. The increase in octroi receipts is attributed to closer supervision and the excellent harvests of the year. When the Local Fund Audit comes fully into play, still further increases may confidently be expected. There was a slight decrease in the proceeds of direct taxation throughout the Province. The decreases under this head in Delhi are explained as being more apparent than real. Simla showed a remarkable expansion in the recoveries from the servants' tax; but lost considerably under the tax on vehicles owing to the opening of the railway. The Lahore and Amritsar figures exceeded those of the previous year by Rs. 36,000 and Rs. 39,000 respectively. A great rise is also observable in Siálkot, Multán, Kasúr and Gujránwála, while in Ráwalpindi there was an increase of almost Rs. 53,000. Decreases are remarkable only in Jhang and Dera Gházi Khan, where they are explained as being due to the prevalence of plague.

Incidence of taxation.

70. The average incidence of all taxation per head of population rose during the year from Re. 1-8-0 to Re. 1-9-7: that of octroi from Re. 1-5-6 to Re. 1-7-1 and of octroi on grain only from Re. 0-12-10 to Re. 0-13-8. The apparent excess over the Government maximum of Re. 1 per head, reported in so many Municipalities, is understood to be due in part to the fact that no allowance has been made for the increase in population since the census. Taxation appears to be heavy in Dera Gházi Khan, Lahore, Amritsar, Kasúr, Gujránwála and Ráwalpindi. On the other hand it is observed to be low in Murree.

Octroi.

71. Though the general working of the octroi tax is reported to have been satisfactory, the low figure of the incidence of taxation in Murree appears to point to remissness in collections. The cost of collection of octroi was low in the big Municipalities of the Province and varied little from last year. The introduction of the Municipal Account Code since the close of the year under report will no doubt necessitate the revision of the collecting establishments, and it will be interesting to watch how the proceeds of the tax under the improved system of collection will go to meet the increased establishment charges. The high incidence of the nett octroi collection at Ballabgarh (where no refunds were granted) is marked.

Other taxes.

72. The attitude of opposition in Delhi to the levy of the house-tax appears to be passing away; but it must be said that the house-tax is nowhere a popular form of impost.

Refunds.

73. The figures relating to the refunds of octroi again indicate the necessity which existed prior to the introduction of the new Account Code of a thorough overhauling of the methods employed by Municipalities in their treatment of through trade. In Delhi, even after the inclusion of the recoveries made in April 1905, the refunds amounted to only 4 per cent. of the gross receipts from taxation. Pánipat Municipality with an income of Rs. 25,068 from octroi refunded only Rs. 3, and Jagádhri where the receipts were Rs. 17,595 granted only Rs. 86. On the other hand, there has been a marked improvement at Hoshiárpur, where the percentage has been raised to almost 14 per cent; and it is very satisfactory to note that all pending claims have been satisfied. The question of refunds appears to have been unsatisfactorily dealt with in Ludhiána and Ferozepore, and the Siálkot Committee is unfavourably noticed and appears unable to meet its liabilities. Bonded warehouses appear to gain but little in popularity, except in the Amritsar and Jhelum Districts. There appears to be a demand for a bonded warehouse at Lahore.

GENERAL.

Plague and health of towns.

74. The general health of the Municipal towns of the Province was good. Cholera was almost completely absent, and the Hill Municipalities were almost altogether exempt from epidemic disease of any kind. Bubonic plague, however, devastated the Delhi Division, and was prevalent throughout the towns of the Lahore and Amritsar Divisions, though in the town of Amritsar it never reached a real epidemic. Severe outbreaks occurred in the Jhelum and Shahpur Districts, and Dera Gházi Khan and other Municipal towns in the Multán Division were severely attacked. The efforts made in Lahore to combat the disease appear to have met with but lukewarm support, and in Dera Gházi Khan and Ballabgarh the members of the Committee seem to have played a discreditable part in running away from the outbreak. Sanitary and conservancy works on a large scale have been either worked out or begun at Delhi, Ludhiána, Amritsar, Lahore and Gojra. The Ambála and Simla water-supply has been improved, and in several towns works of public utility have been opened.

Fires.

75. Large fires occurred in Ambála and Amritsar, and the Murree Convent School was burnt down. This event occurring so soon after the total destruction by fire of the Club of Northern India raises a doubt whether the arrangements of the Murree Municipality for the prevention and extinction of fires are adequate; and the question will require special attention.

26. Military (Volunteers).

76. The strength of the Volunteer Corps on the 31st March 1905 is reported to have been as follows:— Strength and distribution of Volunteer Forces.

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant Instructors.
Punjab Light Horse.	...	Field Officers and Staff	6	...	...	6	49	4
	A	Lahore	2	10	39	51		
	B	Ambála	2	8	32	42	42	...
	C	Rawalpindi	3	8	63	74	65	...
	D	Pálampur	...	1	4	5	5	...
	...	Reservists	1	1	49	51	39	...
		Total ...	14	28	187	229	200	4
1st Punjab Volunteer Rifle Corps.	...	Field Officers and Staff	7	4	...	11	11	10
	A B C and Cadet, ½ Company.	Lahore	11	35	188	234	226	...
	D	Ráwalpindi	3	8	89	100	100	...
	E	Amritsar	2	6	23	31	30	...
	F	Delhi	3	4	26	33	33	...
	G & H	Murree	5	14	73	92	92	...
	I	Dharmsála	1	...	9	10	10	...
	K	Ferozepore	1	6	48	55	54	...
	L	Srinagar	2	6	40	48	47	...
	L Sec.	Siálkot	1	2	12	15	15	...
	...	Reservists	2	...	95	97	97	...
		Add for Supernumerary Officers	...	...	...	18	...	...
		Total ...	38	85	603	744	715	10
Simla Volunteer Rifles.	...	Field Officers and Staff	5	...	...	5	4	3
	A	Simla	3	5	20	28	27	...
	B		2	12	85	99	91	...
	C		2	8	36	46	44	...
	D		2	7	58	67	67	...
	E		3	10	43	56	55	...
	Det.	Kasauli	1	3	13	17	17	...
		Reservists	...	...	36	36	4	...
		Honorary and Supernumerary Members ...	2	...	...	2	...	...
		Total ...	20	45	291	356	309	3
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	10	...	...	10	10	12
	A	Karáchi	2	6	42	50	50	...
	B	Multán	2	12	123	137	137	...
	C	Lahore	8	14	172	194	191	...
	D	Do.	1	15	76	92	90	...
	E	Ambála	3	8	54	65	65	...
	F	Saharanpur	1	13	104	118	116	...
	G	Kotri	2	9	69	80	80	...
	H	Lahore	4	12	112	128	126	...
	I	Quetta	4	8	65	77	77	...
	K	Ráwalpindi	2	16	122	140	140	...
	L	Sukkur	4	7	88	99	99	...
	M	Karáchi City	2	5	64	71	71	...
		Honorary and Supernumerary Members ...	...	...	...	13	...	...
		Total ...	45	125	1,091	1,274	1,252	12
		Grand Total ...	117	283	2,172	2,603	2,476	29

Inspections.

77. The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps, and the North-Western Railway Volunteer Rifles were inspected in March 1905, and the Simla Volunteer Rifles were inspected in September 1904. The results were considered satisfactory.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below:—

Agriculture.—(1) Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1904.

(2) Annual Report of the Experimental Farm, Lyallpur, for the kharif and rabi seasons 1903-04.

(3) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1904-05.

(4) Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1903 to 30th September 1904.

Weather and Crops.—(1) Report on the Meteorology and Climatology of the Punjab for the year 1904-05.

(2) Punjab Season and Crops Report for 1904-05.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1905.

Forests.—Progress Report on Forest Administration in the Punjab for 1904-05.

Mines and Quarries.—(1) Reports on the working of the Dandot Colliery for the half-years ending 30th June 1904 and 31st December 1904.

(2) Statement showing the produce of minerals and gems for the calendar year 1904.

Manufactures.—Report on the working of the Factories Act during the year 1904.

Trade.—(1) Annual Returns of the Internal Land Trade of the Punjab for the year ending March 31st, 1905, and the review of the progress of trade during the past triennium.

(2) Report on the External Land Trade of the Punjab for the year 1904-05.

(3) Report by the Registrar of the Joint Stock Companies on the working of the Joint Stock Companies in the Punjab during the year 1904-05.

Irrigation.—Revenue Report of the Irrigation Department in the Punjab for the year ending 31st March 1905.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agriculture.—Prices and Wages in India, 22nd issue, 1904.

Weather and Crops.—Agricultural Statistics of India, 20th issue, Tables 3-H, 4-H 7, 7-A and 10-E.

Mines and Quarries.—Statistics of Mineral Production in India, 7th issue, 1905.

Report of the Chief Inspector of Mines in India under the Indian Mines Act (VIII of 1901) for the year ending 31st December 1904.

Manufactures.—Judicial and Administrative Statistics of British India, Table XIX.

Railways.—Administration Report on Railways in India for the Calendar year 1904.

Trade.—Accounts of the trade carried by rail and river in India, 17th issue, 1905.]

27. Agriculture.

78. Satisfactory progress has been made during the year with the development of the Agricultural Department; the appointment of a Deputy Director of Agriculture for the Province has been sanctioned; and since the close

Experimental Farms.

of the financial year 1904-05 very large schemes of development have been under consideration which will be detailed in the report for next year. Experiments regarding wheat and cotton have been largely carried out; no less than 25 varieties of wheat having been sown on the Lyallpur experimental farm, the Manager of which spent five weeks on tour in Bombay and Sind visiting Government farms and experimental stations. Arrangements were made for establishing a Seed Farm for the promotion of good indigenous varieties of wheat and cotton at Sargodha in the Jhelum Colony. All the acclimatised American cottons sown on the Sargodha and Lyallpur farms have done well; and selections of the best classes of the seed are being carefully attended to. Special practical trials with salt bush were made in Multán and Hissar, but the reports received were wholly unfavourable. Shows of agricultural produce were held at Ferozepore and Lyallpur, exhibits being numerous and some of excellent quality. These shows will be held again next year.

Punjab Veterinary College.

79. The large increase in the number of competitors for admission to the Punjab Veterinary College is a satisfactory feature of this year's report. Admissions rose from 52 to 78. The amalgamation of the Ajmer with the Lahore College will help to comply with the growing demand for diplomaed students. The separate accommodation provided during the year for canine patients has long been needed; and the institution has begun to be appreciated by the public. There was a slight increase in the earnings of the College.

Civil Veterinary Department.

80. The Civil Veterinary Department during the year was, as the result of the separation of the Army Remount Department, mainly occupied with operations among bovines. The increase in the return of bovine mortality may no doubt be largely due to greater supervision by the staff, who had been relieved of much of their duties towards horses and horse-breeding. But it is observed that the increase is more than covered by the severe outbreak of hæmorrhagic septicæmia in the districts of Lahore and Amritsar. The success and popularity of inoculating operations is very gratifying; while good progress is being made in providing the Province with adequate accommodation in the shape of hospitals and dispensaries. A scheme for bull-breeding at Sargodha is under consideration; and a scheme for providing an adequate supply of stallions in the districts not selected for the operations of the Remount Department has been accepted by Government and by the local bodies concerned. The year witnessed the introduction of the grade of Veterinary Inspectors to supply the interval between the Superintendents and the Veterinary Assistants and so provide for adequate supervision of the latter. At the same time an increase in the number of Veterinary Assistants has been arranged for at the rate of four a year until an Assistant shall have been provided for each tahsíl.

Agricultural pests.

81. The Agricultural Assistant detailed for entomological research is studying insect pests in the vicinity of Lahore, where he can observe most of those to be met with in the Punjab. Remedial measures by means of spraying have been attempted, but with no marked results. The three recognized methods of improvement appear to be the introduction of suitable exotics, selection from indigenous varieties, and hybridisation; but it may be remarked, as regards the last of these methods, that an expert is required to carry the process to a conclusion. Boll-worms and white ants did some damage on the Lyallpur experimental farm.

Loans to agriculturists.

82. In the Provincial Loan Account the year was a quiet one. Remissions under both the Land Improvements and Agriculturists Loans Acts were insignificant, and owing to a couple of excellent harvests the demand for loans was comparatively small. The remarkably large recoveries of the year alone suffice to show the favourable character of the seasons. These recoveries were especially large in Hissar and Rohtak; but in Karnál large suspensions were necessary owing to continued bad harvests. Government have passed orders on the scheme for the simplication of *takávi* accounts; and a suggestion that it

might be advisable to purchase and distribute good seed instead of advancing money for its purchase is under the consideration of the Financial Commissioner.

Co-operative Credit Societies.

83. In connection with the foregoing section a brief note on the Co-Operative Credit Societies will be of interest. In the Bhakkar and Leiah Tahsíls of the Miánwáli District five Agricultural Co-operative Societies are now in existence; and all five are doing well. The accounts are kept in Hindi by the village weighman and in Urdu by the Secretary. Interest is taken at one *seer* of wheat per rupee; and so far no borrower has failed to pay. Co-operative Credit Societies in the Punjab, however, are still in the most rudimentary condition. One district in each of the five Divisions was selected for trial of the experiment; and even in the little that has been done so far, encouraging features are not absent; it is, however, very apparent that co-operation of the District Officers will form the strongest support of any movement of this kind. The first experiments must necessarily have an official tinge about them, but if two or three really successful societies can be started in a tract, spontaneous imitation may be confidently hoped for.

Prices.

84. Statement No. V, which was added last year to the season and crops report, exhibits the wholesale prices per maund at Delhi, Lahore, Ráwalpindi and Multán for unhusked rice, wheat, barley, jowár, bâjra, maize, gram, rapeseed, raw sugar, cleaned cotton, straw and jowar stalks. The retail rates for firewood and salt are also quoted. There was again a brisk trade in food-grains during the year; and the export figures, as compared with those of last year, show an increase of over seven millions of maunds of wheat, and nearly three millions of maunds of gram and pulses. As has been remarked already, the wheat crop of 1904 was a bumper one; and the prices of cereals during the year under report opened low. Fluctuations were unimportant and food stuffs remained cheap up to May; after which apprehensions of a bad monsoon, which have unfortunately been justified, caused prices steadily to rise all round. As was only to be expected, a general fall in the price of salt has followed the reduction in the salt duty. The price of firewood remains unchanged at the four centres; while straw and jowár stalks have been cheap throughout the year.

28. Weather and Crops.

General.

85. The latest Land Revenue Administration Report dealt with the autumn crop of 1903 and the spring crop of 1904; while the Season and Crops Report deals with the autumn crop of 1904 and the spring crop of 1905. From about July 7th, 1904, a weak monsoon current commenced to reach the Southern Punjab; and though good rain fell in certain districts during September, the monsoon must be considered to have been uneven and unfavourable for the Province as a whole, as it practically failed completely over the Central, West and South-West Punjab. The result was an appreciable contraction of 10 per cent. in sowings, as regards cotton, and somewhat extensive failures; while there were notable decreases under bájra and jowár. The acreage placed under cotton was the largest on record, being 31 per cent. in excess of 1903. Compensatory features of the 1904 kharíf were that the districts of the South-Eastern Punjab did well after a succession of bad harvests, and that the failure of the monsoon was worst in the districts most protected by irrigation. Speaking generally, the winter rains were ideal; and in spite of frosts of exceptional severity the spring crop, taking the Province as a whole, may be estimated at 18 annas. Plague continued to affect agricultural operations, but the Jhelum Colony escaped a return of the visitation of the previous year. Among great calamities of the year must specially be mentioned the earthquake of 4th April 1905 which calls for special notice in connection with the Kángra District, where it caused widespread destruction of the water channels on which the valuable rice cultivation of the district is so largely dependent. Their vital importance was at once recognised. Steps were taken for their immediate repair and restoration, and, thanks to the skilled assistance of the Pioneers and Sappers and Miners, almost all were in working order before the advent of the monsoon. The earthquake also caused very heavy losses in cattle and in agricultural homesteads.

Distribution of crops.

86. Climatic conditions tended to restrict cultivation in the kharíf, and particularly favoured sowings for the rabi; and consequently the distribution of cropped area between the two harvests this year compared with last year is shown by the following figures:—kharíf 40·1 against 43·4; and rabi 59·9 against 56·6. Increases occurred under the heads of wheat, barley and cotton—the most noticeable tendency being the steady expansion in the area under cotton.

Irrigation.

87. The area irrigated from all sources was 9,519,435 acres, or 42 per cent. of the total cropped area. This was 159,450 acres less than in the previous year, the falling-off being entirely in the rabi. The area irrigated by Government canals, 5,374,888 acres, represents a net decrease of 134,008 acres, due to the bad working of inundation canals in four districts. On the other hand, the utmost use was made of all the perennial canals in a season of scanty rainfall. Private canals served 458,766 acres, or 46,229 acres less than last year, the cause being again insufficiency of water in inundation canals. Wells were worked in their full capacity in the kharíf, and the area irrigated from them during the year increased by 70,394 acres to 3,522,102 acres.

29. Horticulture.

General.

88. The following notes will be of interest concerning the fruit-bearing results of trees supplied to various districts from the Mahásu orchards some seven or eight years ago. The enquiry made this year shows that the results of the experiments have been fairly successful, but that the fruit-bearing powers of the trees depend almost entirely on the localities in which they are planted; though an allowance must be made for failures due to imperfect knowledge of the proper treatment of English fruit trees. Young fruit trees to the number of 3,800 were distributed during the year in the Punjab and North-West Frontier Province. The failure of the monsoon of 1904 in Lahore and the abnormal cold of the early months of the current year caused considerable damage to the Agri-Horticultural Gardens. The making of new roads has been continued; and it is hoped to add to the beauty of the gardens by the conversion of several untidy areas into lawns. The four gardens of Shahdára, Shálimár, Kudsia and Roshanára continue (with the exception of Shálimár) to be maintained at a loss.

30. Forests.

Alteration in area. Reserved Forests.

89. The area of Departmental Reserved Forests underwent a net decrease of 61,280 acres; 109 square miles or 70,506 acres being disforested in Shahpur Division for colonization and canal purposes, and 26 acres in Lahore for the Punjab Club Association. On the other hand 9,330 acres were added on account of the Silladar Camel Corps in Montgomery Division and by corrections of area.

Protected Forests.

90. The area of Protected Forests has decreased by 300 acres consisting of 246 acres disforested for cultivation purposes, 2 acres made over to the Irrigation Department, and 62 acres leased for cultivation under the Kángra Protected Forest Rules.

Unclassed State Forests.

91. Under Unclassed State Forests the additions include 3,394 acres added in consequence of re-calculations of areas and 70,532 acres, recently Reserved Forests, temporarily classed under this head after "disforestation," pending transfer from the charge of the Department. The exclusions comprise 106,125 acres made over to the Irrigation and the Colonization Departments, 9,325 acres constituted Reserved Forests, 1 acre removed by river action, and 2,168 acres due to correction of survey figures.

Leased Forests.

92. Under Leased Forests the changes were due to correction of areas owing to forest surveys, and 301 acres excluded for cultivation purposes in the

Bashahr Division. The total area of the different classes of forests under the Forest Department at the close of the year was—

	Acres.	Square miles.
Reserved Forests	1,239,263	1,924
Protected Forests	3,141,354	4,909
Unclassed State Forests	1,181,195	1,834
Leased Forests	343,436	537
Total ...	5,905,248	9,204

Forest Settlements.

93. In Lahore 3 acres were settled and added to the Shahdára Plantation, and the settlement of 15 square miles of Unclassed State Forests is in progress. In Montgomery 15 square miles of Unclassed State Forests were declared Reserved Forests during the year. Orders in the cases of the jagir forests of Kángra and of the Chedpur Forest of Shahpur have not yet issued. In Jhang 359 acres of Sahjowál Forest under the Civil Department were notified during the year as proposed Reserved Forest. The settlement of the forests in the valleys of the Pabar, Rupin and Giri Rivers in the Bashahr Division Leased Forests has been completed.

Demarcation.

94. During the year 503 miles of boundaries were newly demarcated and 3,107 repaired. The total expenditure on new works was Rs. 2,679 and on repairs Rs. 3,286.

Surveys.

95. Surveys on a scale of 4 inches to 1 mile were completed by the Imperial Forest Survey Branch in 50 square miles of Unclassed State Forests in Lahore and 46 square miles of Reserved Forests in Jhelum. All the forests, except those of the Salt Range in Shahpur proposed for survey in the programme for ten years submitted in 1899 as modified in 1904, have been surveyed, and a supplementary programme for five years has now been prepared and approved by the Inspector-General and the Local Government.

Working Plans.

96. The prescriptions of Working-Plans were generally observed. In the Simla Hill States the Working-Plan for the Balsan Forests was accepted by the State, and that for Keonthal was completed during the year and was forwarded to the State for acceptance. The Kalsia State Forests were inspected by the Divisional Officer with a view to the revision of the Working-Plan. The examination of the Kumharsain coniferous forests, for which a Working-Plan is required, was also commenced. The preparation of the revised Working-Plan for the Sutlej Valley Forests, 165 square miles, was completed during the year, and the plan is being printedfor submission to the Inspector-General and to Government. For all the Bashahr Forests Working-Plans will shortly be in force.

General protection.

97. There were 5,043 cases of forest offences during the year as against an average of the three preceding years of 4,153. The cases put into court were 970 as compared with a similar average of 1,038; and those compounded were 3,891 as compared with an average of 2,927. These figures show that the tendency to compound rather than to prosecute is continuing to grow; and improved supervision appears to be the explanation. There were in all 816 convictions and 161 acquittals. The amount for which cases were compounded was Rs. 11,898, as against Rs. 7,843 last year, at an average cost of Rs. 1-13-8 per head of persons compounding, as against Rs. 1-8-4. The punishments awarded by Courts appear to have been generally sufficient.

Protection from fire.

98. There were 143 fires during the year as against 227 last year; the area burnt in acres being 9,068 acres as against 6,940 acres; the percentage of total area of forest burnt being the same as last year, 0·1.

Protection from cattle.

99. The areas closed and opened to grazing were as follows:—

Year.	*Entirely closed.*	*Partially closed.*	*Open.*
	Square miles.	Square miles.	Square miles.
1903-04	698	1,048	7,532
1904-05	641	1,146	7,419

Reproduction, natural and artificial.

100. The Chamba, Kulu and Bashahr Divisions report the satisfactory state of regeneration of the deodár forests. The oak and the blue pine suffered considerably from weevils; while damage by landslips followed on the earthquake, and considerable damage was due to excessive frost. Cultural operations are conducted in all Divisions, but the result for the year was a net addition of 360 acres only.

Experiments.

101. The raising and planting of *Robinia* appears discouraging; but the Spanish chestnut seems likely to flourish in Bashahr and Kulu. The *Pinus pilaster* and China oak are both reported to be dying off in Simla. The *Podophyllum emodi* has failed to germinate in Chamba; and a few new plants from the acorns of the English oak have been raised in Kulu.

Outturn of forest produce.

102. The following summary gives a statement of the produce removed from the forests during the year under report:—

	Timber.	Fire-wood.	Bamboos.	Grass.	Grazing.	Minor produce.
	Cubic feet.	Cubic feet solid.	Number.	Rs.	Rs.	Rs.
Reserved Forests	428,752	4,456,441	403,254	36,514	1,06,378	15,126
Protected Forests	1,649,272	18,555,642	41,232	30,062	1,75,862	43,929
Unclassed State Forests ...	126,369	2,599,403	23,607	610	34,552	29,135
Leased Forests	1,638,295	2,983,113	66,400	17,870	17,434	16,687
Total for 1904-05 ...	3,842,688	28,594,599	534,496	85,056	3,34,226	1,04,877
Total for 1903-04 ...	4,419,302	27,287,538	979,629	81,508	3,71,876	1,03,617

Financial results.

103. The following statement compares the revenue and expenditure of the year with those of the previous year:—

Year.	Revenue.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1904-05	19,07,374	9,74,009	9,33,365
1903-04	16,51,077	9,55,918	6,95,159
1898-99 to 1902-03, average	13,95,701	9,67,478	4,28,223

ARBORICULTURE.

Arboriculture.

104. There has been a considerable planting of ornamental trees, shrubs and the like, during the year under report in the Lahore Gardens; and the crop of seed collected was good. The demand for young plants from the nurseries is growing. Sowings and plantings, mainly of *kikar*, in the Lyallpur Colony have had satisfactory results; while the small plantations held by Lambardárs, and the tree-planting on village sites, are reported to be promising. Arboriculture is not a condition of any colonists in the Chenab Colony, except those on the extensions and camel service grantees, the main body of whom possess no notion of arboriculture.

31. Mines and Quarries.

Gold.

105. Small quantities of gold are obtained from gold washings in the streams in Ambála, Jhelum and Miánwáli Districts.

Coal.

106. During the year under report 10 new coal mines were opened in the Jhelum District, and 2 in the Attock District. These were all small workings. The total output of coal in tons in the Punjab was 45,594 tons, an increase on last year; the daily average number of workers in the coal mines amounting to nearly 2,000 persons out of a total number of 3,526 workers in mines of all kinds. The number of workers below ground was 1,350, and above ground 595. There was only one death from accident. The most important colliery is that worked at Dandot by the North-Western Railway. The output this year was 31,003 tons as compared with 43,714 tons last year. The colliery showed a loss of Rs. 26,500 on the year's working, but the gross profit since the commencement of operations to December 1904 amounted to Rs. 10,53,622. Considerable damage was caused by inundations; and there was a scarcity of labour due to plague and to contiguous workings not under Dandot control.

Salt.

107. There are 4 salt mines in the Punjab which come within the scope of the Mining Act. They afford employment to 1,329 persons; and the output this year was 107,413 tons.

Slate.

108. The output of slate was 673 tons, 207 persons being employed at the Gurgaon quarry. The Hoshiarpur limestone quarry employed 45 persons, and had an output of 1,000 tons.

32. Manufactures.

Large industries.

109. During the year there were in the Punjab 191 Government and private factories worked by mechanical power as against 188 in the previous year. Of this number no fewer than 134 factories were concerned with the cotton industry as their principal manufacture, while 7 others also carried on cotton-ginning as a subsidiary business. As evidenced by the number of factories, flour-milling, under which head 19 mills were returned, was the only other important industry in the Province. The largest of the cotton factories is at Hissar; while other noticeable industries are the carpet industries of Amritsar and Ambála, and the Sujánpur sugar industry. There is a distillery at Amritsar; and iron and brass foundries at Delhi, Lahore and Siálkot.

General.

110. Out of the total of 191 factories returned, 167 were inspected during the year, leaving 24 uninspected, of which 5 were quiescent, 2 were found closed when visited and 3 were not registered until towards the close of the year. The sanitary condition of the factories throughout the Province was generally good, as was the health and condition of the operatives. More than 4,000 women and children were employed; and the provisions of the Act regarding their employment were, in the main, duly observed. There were 6 prosecutions under the Act, resulting in 3 convictions. Accidents increased by 33, fatal accidents numbering 11.

33. Trade.

Total trade of the year.

111. Last year's report dealt with the returns for the triennium 1901-02 to 1903-04, and consequently the remarks under this and the following sections will be of a less detailed nature, and will be confined to a notice of the more important features. As has already been remarked, the *rabi* harvest of 1904 was a bumper crop, the main feature being a record wheat harvest; while the *kharif* harvest was an average one; and prices generally ruled steady throughout the year. The decreases in the imports and the marked increases in the exports are the natural consequence of a good harvest and bumper crops.

The total trade of the Province in each of the past three years, exclusive of animals and treasure, is shown in the subjoined table :—

Years.	Imports.		Exports.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1902-03	25,?78,300	15,55,41,800	26,294,933	11,89,93,028
1903-04	21,934,931	15,09,47,156	36,105,550	14,66,66,094
1904-05	24,402,169	17,52,37,084	52,648,111	18,65,51,449

River-borne Trade.

112. The annexed table gives for each of the last five years the figures for river-borne trade. It will be seen that imports continue to show a decrease. The actual decrease in the past year is due to a falling off under the head "Stone and Lime"; and the increase in the value of the imports is doubtless due to the increased import by river of the more valuable articles such as iron and steel (wrought), kerosine oil and dried fruits. The marked rise in the value and weight of exports is due entirely to the increase by more than half a million maunds under the head "Grain and Pulse."* This no doubt represents the surplus of the harvests sent down the Indus to Karachi :—

	Mds.
*1904-05	1,435,971
1903-04	868,740
Increase ...	567,231

Years.	Imports.		Exports.	
	Quantity in maunds.	Value in rupees.	Quantity in maunds.	Value in rupees.
1900-01	172,064	10,49,245	834,807	32,18,274
1901-02	183,010	10,94,584	1,719,750	49,28,510
1902-03	143,260	9,29,599	1,422,598	40,04,535
1903-04	138,150	9,14,103	1,184,422	34,45,575
1904-05	134,880	9,79,863	1,761,429	45,23,779

Imports.

113. As regards fluctuations in imports, the most remarkable rise is an increase of 115½ lakhs in the value of European cotton piece-goods. The increase of 13¾ lakhs in the value of steel rails and fish plates and of 21¾ lakhs in the value of railway materials (other sorts) is due to the development of railway construction in the Punjab. Coal and coke show an advance of 12½ lakhs, and this may be ascribed partly to the increased consumption by the Railway Companies and partly to the expansion of factories. The increased import of gunny bags, showing an increased value of 27¼ lakhs, was probably almost entirely to meet the demands of the excellent rabi harvest of 1904. Under woollen piece-goods (Indian) there is an increase of 14 lakhs. The other rises are not considerable, and call for no remark. The largest fall is under "Iron and steel (wrought)," which shows a drop of 11 lakhs. This represents a decrease in the imports at Karachi. "Apparel" shows a fall of 10¼ lakhs, which chiefly occurred in the imports from Calcutta to the Punjab. The other decreases need not be noticed.

Exports.

114. Turning now to exports, Wheat shows an increase of 198½ lakhs in value; the result of a good rabi harvest in 1904. An increase of 54 lakhs in

the value of Rape and Mustard seed, of 15¾ lakhs in Other Oilseeds, of 49½ in Gram and Pulse, of 29 in Jowár and Bájra—all testify to the prosperity of agricultural Punjab during the last year. The value of raw cotton shows a further rise from 255 to 275 lakhs. The decreases are unimportant, and need no special remark.

Distribution of trade.

115. As regards the distribution of the total trade between the various Provinces, Native States and Seaports, Karáchi continues to enjoy the largest share, both of imports and exports, and also shows a slight increase on last year's figures. There is a falling off both in the import and export trade between the Punjab and the United Provinces. In other respects there are practically no variations. As regards the relative trade of the blocks into which the Punjab Railway system is divided for trade purposes, except for an increase in the trade of Cis-Sutlej Territory not including the city of Delhi, and a fall in the trade of the Sutlej Jhelum block, the fluctuations are unimportant.

TRADE WITH TRANS-FRONTIER COUNTRIES.

Afghanistan trade.

116. Afghánistán shows an increase, both in weight and value of imports and exports. The decrease in the import (and increase in the export) of goats and sheep is attributed to the lack of good grazing. The marked increase in the import of raisins and almonds is due to the fact that the Amír has relaxed the former stringent restrictions on this trade, and they are now sold in greater quantities and cheaper than before. In exports indigo and brass and copper are the only classes that show a decrease. The increase in the export of manufactured leather goods is satisfactory.

Chinese Tibet trade.

117. There is a decided decrease in the amount and value of imports from Tibet, which is attributed to the effects of the Tibet Mission, the want of improvements in trade routes, and the fact that owing to the severe winter the passes to China were blocked. There was also a marked decrease in the value of exports. Raw wool, the most important of the imports, shows a decrease of no less than Rs. 49,930; but borax, next in importance, shows an increase of Rs. 1,410. The chief decrease in the value of exports is found in silver, cotton piece-goods and Indian tea. There would seem to be a brisk trade in coral; and the appearance of woollen piece-goods is doubtless due to the supply of warm clothing to troops and followers.

Ladakh trade.

118. For Ladákh the weight of the imports shows a decided decrease, and the value a distinct increase, due almost entirely to the new condition of the *charas* trade—the new duty on that commodity (Rs. 6 per seer) having been imposed with effect from the 1st April 1904. *Charas* forms the largest medium of exchange in the Leh Bazár between the Yárkandi and Punjábi trader; and, though the increased price will doubtless affect the quantity imported, it seems likely that the trader will see that the people accustomed to the drug will take it at any price, the increased taxation being consequently shared between the trader and consumer. Exports show an increase both in weight and value; coral being much in demand. The increase in the value of European piece-goods is a good sign.

Kashmir trade.

119. As regards Kashmír, the weight of imports has slightly decreased, but there has been a considerable increase in value, for the most part due to the import of gold worth Rs. 56,40,573. It seems that this import of bullion does not necessarily denote smuggling, as it is mainly due to gold being sent by the Kashmír Darbár for investment in British India. The enhanced duty has decreased the weight and increased the value of *charas*; while there is a very marked decrease in the timber imports and in the silver trade. The fall of over a lakh and-a-half in the import of unhusked rice is ascribed to the prevalence of plague in certain places in Kashmír. There is a decrease in exports both in amount and value; but a marked increase under Indian tea.

JOINT STOCK COMPANIES.

Number and capital of companies.

120. The number of companies having a capital divided into shares rose during the year from 57 to 59, and the paid-up capital increased from 89 to 101 lakhs. Of the increase in paid-up capital nearly half has taken place in banking institutions, and nearly all the balance in mills, presses and sugar manufacture.

New companies.

121. The new companies include a Native Co-operative Bank, and a Company, largely European, for the acquisition of mining rights in Kashmír.

Investment of capital.

122. There are now 9 banking companies registered in the Punjab with a paid-up capital of 21½ lakhs, and 25 mills and presses dealing mainly with cotton, which have a paid-up capital of 49. The Murree Brewery Company accounts for 18 lakhs of paid-up capital, and the 18 merchant and trader companies for nearly 8 lakhs between them.

Failures.

123. The failures during the year (three in number) have occurred in mills and presses.

Working of Joint Stock Companies.

124. Both as regards friendly and other societies conducted under native management it must be said that, as a rule, the officers of the societies do not appear to realise their responsibilities, nor the public the best methods of guarding their interests. The need of actuarial calculation is very much ignored; and so long as current liabilities are being met and a dividend is being paid, the possibility of a catastrophe never appears to be contemplated. The law does not contemplate official protection of the interests of shareholders and creditors by the inspection of offices and books of registered companies on the part of the Registrar of Joint Stock Companies; and the Punjab public have yet to learn that it is their business to protect their own interests by demanding access to documents, by ascertaining that their auditors are properly qualified, and by deposing unsatisfactory Directors. There were two prosecutions of Directors during the year,—one resulting in a conviction and sentence.

Fees.

125. The fees realized during the year were Rs. 2,573 as contrasted with Rs. 2,476 in the preceding year.

34. Public Works.

Total expenditure.

126. The total outlay of the year on Public Works in the Roads and Buildings Branch amounted to 59 lakhs.

Imperial Civil Works.

127. The total outlay was nearly 6½ lakhs. The new General Post Office at Lahore and the new Imperial Civil Secretariat at Simla were completed; while additions and alterations on a very large scale at Snowdon, the residence of His Excellency the Commander-in-Chief, were sanctioned and put in hand.

Imperial Military works.

128. The total outlay on works was Rs. 91,394. The Remount Depôt at Mona in the Jhelum Canal Colony was taken over from the Military Works Services. At the request of the Military Department of the Government of India, it was decided that all the Imperial stallion stables in the Province should be taken over by the Punjab Government for maintenance, and the transfer was put in hand.

Provincial Civil Works.

129. The expenditure amounted to nearly 22½ lakhs on new works, and to nearly 12½ lakhs on repairs. The office for the Colonization Officer

at Sargodha was completed; a permanent electric light installation was provided for Government House, Lahore; Rs. 13,000 were expended on new fittings for the Lahore Museum; a new Normal School was built at Lahore, and additions were made to the Central Model and Central Training Schools. A new Normal and Model School was built at Delhi. Other works include improvements to jails; new Police Lines at Miánwáli and Campbellpur; Civil rest-houses and offices.

130. The expenditure on communications amounted to nearly 13½ lakhs as against 13 lakhs last year. The increased expenditure on new roads is being maintained, but the wants of the Province in this connection are very heavy. In the Chenab Canal Colony very good progress was made with feeder roads which are most necessary for the conveyance to the railway of the large amount of field produce raised in the Colony. Six miles of the Sángla-Shorkot Road were completed and opened to traffic; station roads are well in hand at Campbellpur; and in the Jhelum Canal Colony the road from Shahpur to Sargodha, the probable new head-quarters of the district, was completed. In Lahore itself, extensive improvements to the Upper Mall were put in hand. Roads.

131. Three out of the five open septic tanks for sewage disposal were completed at Simla; as also were two subsidiary steam pumping installations designed to supplement the water-supply in abnormally dry years by 70,000 gallons. A new mule road from Sanjauli to Kaithu was two-thirds finished. The work of improving the road from Sanjauli to Mashobra into a good driving road was nearly completed; and satisfactory progress has been made in enlarging the old Sanjauli Tunnel to give a roadway of 18 feet with a height of 16 feet. A tunnel is also in course of construction under the Ridge near the Town Hall. Simla improvement.

132. The Victoria Jubilee Hospital at Amritsar was completed at a cost of 1¾ lakhs of rupees, and was opened by His Honour the Lieutenant-Governor on the 17th November 1904. At Lahore, work was started on a platform and pedestal to carry the statue of the late Queen Victoria. It is to be surmounted by a domed canopy carried on pillars, the whole rising to a height of 50 feet and being built entirely of white marble. The Victoria Jubilee Hospital.

133. Provincial boat bridges were maintained over the Rivers Jhelum at Khushab; Ravi at Shahdara; and Indus at Dera Gházi Khan. During the hot weather the North-Western Railway as usual worked a steam ferry service at Dera Gházi Khan supplemented by the Koreshi boat ferry. Boat bridges.

134. No relief works were required during the year, and work was restricted to keeping the famine programmes up to date and preparing new schemes. Projects for providing work for 350,000 labourers for six months were added to the programmes during the year. Famine Relief Works.

135. The work in the Lahore Division became so heavy owing to the large number of sanitary and other works which are being carried out by Government for the Municipality that it became necessary to open a second Executive Division to deal mainly with these Municipal schemes and also to relieve the original division of some of the ordinary work. This arrangement came into force from the 15th December 1904. A new sub-division was found necessary at Campbellpur, the head-quarters of the new Attock District, to construct the numerous Civil buildings required. An additional sub-division was formed at Rohtak, to relieve the Hissar sub-division of the charge of that district, the charge of the two being too scattered for one Sub-Divisional Officer. The Kasauli Sub-Division was abolished as the special works for which it was formed were completed, and the Kulu Sub-Division was temporarily closed for the winter months, the staff being transferred to Simla for employment on the construction of new roads, enlargement of the Sanjauli Tunnel and construction of the tunnel under the Ridge. Administrative changes.

Dera Ghazi Khan Protective Works.

136. The river Indus at Dera Gházi Khan for the past year under review has been flowing in two main channels of nearly equal volume; the larger one taking a more easterly direction with a greater velocity and the smaller showing a tendency to erode the bank to the north of Cantonments and impinge on the nose of the stone bund. It was consequently necessary to strengthen the stone bund at a cost of Rs. 10,233, and as further danger was apprehended, a reserve of 70,000 cubic feet of stone was collected. The main stream, however, continued to flow in the more easterly channel, probably forced over by the brushwood groyne constructed by the Irrigation Branch which held and was most effective and all danger appeared to be at an end with the close of the flood season, the only suspicious element in the situation being the steady erosion that has taken place on the bank to the north of Cantonments.

Miscellaneous Public Improvements.

137. The works classified under this head are mainly those of a local character connected with sanitary improvements in towns or with private undertakings, which for convenience are carried out by the Public Works Department. The most important of these are mentioned in the sections no Medical Relief and Sanitation in Chapter VI. The new Civil Station at Sargodha, which will probably be the head-quarters of the Shahpur District, was laid out with roads, public gardens and residential and other sites, and some of the more important roads were metalled. Planting of trees in the gardens and as avenues along the roads was put in hand. Shops were built in some of the bazárs. At Toba Tek Singh and Bhalwal metalling of the main streets was carried out and shops were built in the Grain Market in Bhalwal. Land was taken up at convenient centres along the new Jech Doab Railway for markets for the sale of local produce. Land was taken up for the Civil Station and bazár at Campbellpur and a number of metalled roads in the station were put in hand. Projects aggregating Rs. 13,76,000 were either prepared or scrutinized by the Public Works Department for different local bodies.

Railways and Tramways.

Railway extensions in the Punjab. Formation of Railway Board.

138. The Kálka-Simla Railway on the 2′ 6″ gauge which was opened for traffic last year must for some time to come remain a noticeable feature of the report. The Borogh Tunnel, 3,752 feet long, on this railway was completed during the year. This is the second longest tunnel in India. The formation of a Railway Board for the general control and administration of Indian Railways has been sanctioned by the Secretary of State for India, and the members of the Board assumed office in March 1905. The railway survey for a branch line from Lodhrán to Mailsi (40 miles on the 5′ 6″ gauge) on the North-Western State Railway was completed during the year; and two other surveys are in progress. A concession has been granted for the construction, on the 5′ 6″ gauge, of the Amritsar-Patti Railway, about 27 miles in length.

Traffic.

139. The development of passenger traffic has continued; and a larger number of pilgrims, native marriage parties and visitors to fairs were carried by railway. Of the increase of Rs. 364·15 lakhs in the gross receipts from Indian Railways, the North-Western State Railway earned no less than Rs. 129·98 lakhs, or 36 per cent.; while of the increase in the goods receipts, the same railway earned Rs. 123·85 lakhs. There were three accidents on the line, resulting in 4 persons being killed and 19 injured. Slight damage to the line was caused by landslips and rain.

No Tramways or Provincial Railways.

140. There are no public tramways in the Punjab, and no railways under provincial control.

35. Irrigation.

General progress of canals.

141. There are now eight canal systems classed as Productive Major Works,—the Western Jumna, Bari Doab, Sirhind, Lower Chenab, Lower Jhelum,

Upper Sutlej, Sidhnai and Indus Inundation Canals; while there are two classed as Productive Major Works under construction, the Upper Chenab and Upper Jhelum Canals. Expenditure on capital account was incurred on all these canals except the Sidhnái, but it is only necessary to notice the expenditure of 9 lakhs as regards the Lower Jhelum and 6 lakhs as regards the Indus Canals. The total area irrigated by all the canals—Imperial, Provincial and Native States—during the year was 6,306,384 acres compared with 5,852,185 acres, the average of the three years ending 1903-04. Matters of interest relating to the different canals are noticed below.

142. The year was one favoured by seasonable rainfall during the currency of both crops, and it is therefore the more satisfactory to find that the total area irrigated was the second highest yet recorded; the record belonging to the comparatively dry year 1897-98. There were no floods in the river; and the total area irrigated was 760,220 acres as against 663,792 acres last year, showing a considerable advance towards the maximum possible, *viz.*, 809,000 acres. The net income of the year was Rs. 17,39,065, amounting to 10·07 per cent. on the capital outlay. Western Jumna.

143. The mean rainfall was below the average, but the crops generally were excellent. There was but little damage caused by floods, and the abnormal frost did not seriously effect the outturn of the crops. The total area irrigated forms a new record, being 955,741 acres, or nearly 20,000 more acres than last year. The net income of the year amounted to Rs. 24,04,892, a percentage of 12·13 on capital outlay. Bari Doab.

144. The rainfall was moderate and seasonable, though a severe frost necessitated very large remissions on the rabi crop. A project is being prepared for extending irrigation by means of a new British Branch to be called the Sirsa Supply Branch, which will provide for kharíf irrigation in a tract particularly subjected to drought. The total area irrigated was 1,160,870 acres compared with an average of 1,074,571 acres, taking British and Native States Branches together. The profits earned on the British Branches amounted to Rs. 17,04,180, equivalent to 6·86 per cent. on capital outlay. Sirhind Canal.

145. The total area irrigated by the Lower Chenab Canal during the year (including some 59,000 acres which were watered, but not assessed because the crops failed to mature) amounts to no less than 2,005,039 acres; and these figures show the very remarkable progress this canal has made in a very short time. Owing to the very great length and size of the Gugera Branch as well as to the new extensions made and contemplated, a sixth Division (the "Buralla Division") has been formed in this Circle. The total area of Crown waste land allotted up to date on this canal amounts to 1,819,466 acres. Lower Chenab.

146. The capital expenditure incurred on this canal during the year amounted to over 9 lakhs. The area irrigated during the year was 305,900 acres as compared with 279,260 acres during the previous year. The results of the year's working are disappointing, owing to the small area sown in kharíf 1904; and for this the severe visitation of plague must be held accountable. The gross revenue of the year amounted to Rs. 4,85,906, leaving a deficit of Rs. 19,435 on the year's working. Lower Jhelum Canal.

147. The sanction of the Secretary of State for India to the Triple Canal Project Estimate (of which the Upper Chenab Canal forms the second link) was received in January 1905, and the same remark applies to the Upper Jhelum Canal, which forms the first link in the chain. Expenditure in connection with these two projects has been on account of surveys. Upper Chenab and Upper Jhelum Canals.

148. The year was not a particularly favourable one on the three Inundation Canals which are classed as Major Works, though the Sidhnái Canal was in flow 263 days during the year as against 161 days and 186 days Major Inundation Canals.

in the two triennial periods ending 1900-01 and 1903-04, respectively. The area irrigated increased by 43,000 acres on the Sidhnái, and decreased on the Upper Sutlej and Indus Inundation Canals.

Minor Irrigation Works.

149. The Minor Irrigation Works under the control of the Irrigation Department comprise the Inundation Canals of the Lower Sutlej, Chenab, Shahpur (Imperial), Shahpur (Provincial), Jalálpur, Muzaffargarh, Ghaggar, Rangoi, and Ravi Inundation Canals. The year was not a very favourable one for these canals, chiefly owing to failure of river-supply and to the prevalence of plague. There is no capital account on these canals. The irrigation done by them was very considerably less than last year.

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications :—

(*a*)—DEPARTMENTAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1903 to 30th September 1904.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the year 1904-05.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1904-05.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1904-05.

Stamps.—Note on the Stamp Statements of the Punjab for the year 1904-05.

Income Tax.—Punjab Income Tax Report for 1904-05.

Forests.—Progress Report on Forest Administration in the Punjab for 1904-05.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1904-05.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1904-05.

(*b*)—FINANCIAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, TWELFTH ISSUE.

Salt.—Tables III 11 and 12.

Excise.—Table V 12.

Stamps.—Tables VIII 22 to 24.

Income Tax.—Tables VIII 2, 3, 8 and 9.]

36. Gross Revenue and Expenditure.

General.

150. The balance sheet of the year works out as follows :—

The income and expenditure of the Railways, Post Office, Telegraph and Salt Departments are excluded from the account, and Military expenditure and Capital expenditure on canals are also omitted from the calculation.

Details of revenue.

151. The revenue raised in the Province during 1904-05 is made up as follows, last year's figures being quoted for comparison :—

SOURCE OF REVENUE.	1903-04.	1904-05.
	Lakhs of rupees.	
Land Revenue ...	2,51·51	2,63·92
Irrigation (excluding land revenue due to canals)	1,75·26	1,82·61
Salt	57·04	52·91
Local Rates	44·76	47·35
Stamps ...	40·48	40·36
Excise and Opium	28·73	32·01
Income Tax	11·69	12·20
Forests ...	17·18	18·74
Police	7·05	7·43
Civil Works	6·48	7·90
Interest	3·46	3·23
Law and Justice	3·18	3·34
Tribute	2·92	4·10
Jails	1·57	1·80
All other items	13·75	13·89
TOTAL RECEIPTS ...	6,65·06	6,91·79

The steady all-round increase of last year was maintained except under the head of Salt, the revenue from which fell in consequence of the reduction in duty. The total rise in receipts came to 26·73 lakhs.

Expenditure.

152. The expenditure, excluding expenditure of the Military, Railways, Post Office (Imperial) and Telegraph Department, Municipal expenditure and Capital expenditure on canals, amounted to 3,72·89 lakhs in 1904-05. The detailed items, with corresponding figures for the previous year, are given below:—

Departments.	1903-04.	1904-05.
	Lakhs of rupees.	
Irrigation	65·52	72·96
Public Works	64·85	61·56
Land Revenue	41·72	43·67
Police	37·56	37·82
Law and Justice	33·62	34·27
Medical	14·97	14·67
Education	17·18	19·50
General Administration	12·69	13·76
Superannuation Allowances and Pensions	13·36	14·23
Jails	9·76	9·50
Forests	11·56	10·12
Political	7·64	7·00
Stationery and Printing	5·28	5·07
Salt	4·23	3·89
All other items	29·77	25·87
Total Expenditure	3,69·71	3,73·89

153. The following is an abstract of the gross income and expenditure for 1904-05 as recorded in the books of the Accountant-General, Punjab :— Abstract of income and expenditure.

	Receipts.				Expenditure.			
	Imperial.	Provincial.	Local.	Total.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue and Expenditure.	1,56,60,331	2,61,92,257	50,48,116	4,69,00,704	26,29,439	2,21,70,372	39,81,189	2,87,81,000
Contributions ...	...	7,90,626	5,465	7,96,091	...	5,465	7,90,626	7,96,091
Debt and remittance heads.	...	...	...	27,56,41,680	...	...	...	29,06,60,691
Total ...	1,56,60,331	2,69,82,883	50,53 581	32,33,38,475	26,29,439	2,21,75,837	47,71,815	32,02,37,782
Opening balance	...	...	...	63,84,229	Closing	balance	...	94,84,922
Grand Total	1,56,60,331	2,69,82,883	50,53,581	32,97,22,704	26,29,439	2,21,75,837	47,71,815	32,97,22,704

37. Land Revenue.

154. The land revenue collections for the year ending 30th September 1904 have been reviewed in Chapter II, and though the land revenue and the financial year do not entirely correspond, the reasons already given for an increase of income under this head hold good. The receipts for the financial year rose by over 12 lakhs. Increase of land revenue.

38. Irrigation.

155. The capital expenditure to the end of 1904-05 on all canals in operation for which a capital account is kept, inclusive of contributions towards the Sirhind Canal, amounts to nearly 1,093 lakhs, of which nearly 19 lakhs were spent during the year. Capital expenditure.

156. The income realised during the year came to nearly 213 lakhs, while the expenditure, other than Capital and Interest, amounted to 74 lakhs, thus leaving a profit balance of about 1,39 lakhs, which represents proximately 12·6 per cent. on the total Capital Outlay. If Interest charges, amounting to some 41 lakhs, be included in the calculation, the profit balance comes to 98 lakhs, and the percentage to 8·9. The condition of the Irrigation Department has been already discussed in detail in Chapter IV. Income and expenditure.

39. Opium and Excise Revenue.

157. The whole Excise administration is shortly to be brought under review by a Commission appointed by the Government of India. The most striking feature of the Excise Administration during the year under report has been the remarkable increase of $3\frac{1}{2}$ lakhs in the revenue derived from liquors. A small portion of this increase is due to the fall in imports from the Rosa Distillery, which have decreased by some 10,000 gallons, but is mainly accounted for by the heavy rise in consumption of country spirits. The statement of prosecutions and convictions for excise offences shows that the year was one of considerable administrative activity; it is probable that the Excise authorities have begun to make some headway against illicit distillation; and this fact accounts for the greater part of the increase, a repetition of which must be expected as the administration continues to improve. The increase is further accounted for in part, by such abnormal conditions as the intense cold which prevailed during the spring and the large demand for spirits as a prophylactic against plague; while there can be no doubt that a certain legitimate and unobjectionable increase in consumption follows naturally and inevitably upon years of prosperity. The high rate per head of consumption of opium in the General.

Phulkián States is remarkable, and it is hard to explain it except by the suggestion that a large amount is imported in order to be exported for illicit sale in British India so as to escape the vend license fees; but further enquiries are necessary before the hypothesis can be considered as proved. The administration of the year has been marked by a stricter control of the *charas* trade, the duty on which has been trebled. It is hoped that the appointment of a new *charas* officer for the warehouse at Leh will lead to the detection of the undoubted leakage which takes place prior to delivery at Ráwalpindi or Sultánpur.

40. Salt Revenue.

Effect of the reduction of salt duty.

158. The gross revenue of the Department, Rs. 1,69,95,683, was less by Rs. 3,48,622 than the gross revenue in 1903-04. The falling off was mainly due to the reduction in the duty which was ordered with effect from the 22nd March 1905, but there was a decrease in the sales of full duty-paid salt of Mds. 8,199, compared with the sales in 1903-04. Sales were very dull in every Division for some time before the Budget statement was announced, as the further reduction made in the duty was anticipated by the traders. The total charges, Rs. 10,77,983, fell by Rs. 40,019, the percentage of charges on the gross receipts being 6·34 per cent. in 1904-05 against 6·44 per cent. in 1903-04. The net receipts, not excluding treaty payments, amounted to Rs. 1,59,17,700, compared with Rs. 1,62,25,527 in 1903-04, and the net revenue, after deduction of all treaty payments, was Rs. 1,29,51,021.

Cis-Indus and Kalabagh Salt Mines.

159. The sales during the year, 2,488,711 maunds, fell short of the sales in 1903-04 by 174,069 maunds; and this decrease occurred almost entirely at Khewra, the outbreak of plague which occurred there during last year having caused the present year to open with a large uncleared balance of through traffic salt. Although plague fortunately did not reappear in Khewra during the year under review, the sales of the Khewra Depôt represent only 85·36 per cent. of those of the whole Division—the first time since 1895-96 that the proportion has been so low. The total proceeds from the Cis-Indus and Kálabágh Mines amounted to 51 lakhs of rupees as against 55¼ lakhs last year.

Mandi Mines.

160. The sales from the Mandi Mines fell by over 13,000 maunds as compared with the previous year; this decrease being chiefly due to the severity of the past winter.

Sultanpur Salt Works.

161. The sales of Sultánpuri salt during the year exceeded those of last year by 5,000 maunds, and those of 1902-03 by 19,000 maunds; while there was scarcely any uncleared balance at the close of the year.

41. Stamp Revenue.

Triennial figures.

162. This year's report deals with the triennial period 1902—1905. Omitting the figures for the sale of plain paper, the average annual net receipts for the triennium 1902—1905 contrast as follows with those of previous periods:—

	Rs.
1890—1893	34,36,871
1893—1896	35,15,191
1896—1899 (period of distress)	37,10,637
1899—1902	36,40,565
1902—1905	37,97,285

Though slightly less in 1904-05 than in the preceding year, the figures show a steady growth of net revenue from stamps affected temporarily, if at all

by accident or by legislation; but the growth is not uniform under the two heads. Under Non-Judicial there is a fall of Rs. 30,000 on the figures of 1893: while the rise under Judicial has been continuous, if by no means steady, at the rate of nearly a lakh in each triennium. The continued rise in the income from Judicial stamps points no doubt to an increase in litigation, but once it is admitted that the rise is largely due to the increased value rather than the increased number of suits, to a development of urban as opposed to rural litigation, it is clear that it is impossible to draw any definite conclusion from the figures of the Province as a whole as to the effect on this branch of the Stamp Revenue of the Alienation of Land Act. That Act has, no doubt, a tendency to encourage suits for money; but the substitution of money-decrees for permanent alienations of land is not a change to be regretted. As regards the new Limitation Act, it is too soon as yet to draw any conclusions from the figures. But its avowed object was to discourage and render unnecessary frequent suits; and it seems almost impossible that it should not have this effect, to some extent at least. As regards the sale of Non-Judicial stamps, in nearly all the districts of the Province the anticipated effect of the Act continues, and the average income from the sale of Non-Judicial stamps was close upon a lakh of rupees less than the average of the previous three years. The rapid growth in the income from one-anna receipt stamps is again a feature of the statistics. The annual average for 1899—1902 was Rs. 1,40,603. In 1902—1905 it was Rs. 1,60,567, and in the third year of the triennium it touched the high figure of Rs. 1,73,775. The rise was practically universal throughout the Province.

42. Assessed Taxes.

Triennial figures.

163. This year's report deals with the triennium 1902—1905. The triennium contains two features of more than usual interest: during the whole of the period the figures relate to the Punjab as separate from the North-West Frontier Province, and in this period was passed Act XI of 1903, which naturally has had a very marked effect on the returns and general administration of the tax. The following tables show (*a*) the percentages paid by the different classes contributing to the total assessment under all parts, and (*b*) the effect of the new Act on the present Class I (paying on incomes from Rs. 1,000—1,250) :—

(*a*)

Class.	1902-03.	1903-04.	1904-05.	Class.	1902-03.	1903-04.	1904-05.
Rs. Rs.				Rs. Rs.			
I, 500 to 750	14·5	...	...	VII, 5,000 to 10,000	11·2	13·4	13·3
II, 750 to 1,000	9·7	...	...	VIII, 10,000 to 20,000	7·1	9·8	9·7
I, 1,000 to 1,250	8·3	13·8	14·04	IX, 20,000 to 30,000	2·7	3·6	3·5
II, 1,250 to 1,500	6·6	8·3	8·08	X, 30,000 to 40,000	2·4	2·3	2·7
III, 1,500 to 1,750	5·2	6·7	6·5	XI, 40,000 to 50,000	0·7	1·8	0·8
IV, 1,750 to 2,000	5·1	6·2	6·05	XII, 50,000 to 1,00,000	1·3	1·7	2·9
V, 2,000 to 2,500	6·9	8·5	8·2	XIII, 1,00,000 and more	3·2	4·02	4·6
VI, 2,500 to 5,000	14·4	17·9	17·5				

(*b*)

Number of assessees.	On income of		
	Class I, Rs. 500—750.	Class II, Rs. 750—1,000.	Class III, Rs. 1,000—1,250, present Class I.
1902-03	18,481	8,133	5,449
1903-04	...	...	7,397
1904-05	...	...	7,708

It may be said that the new Act has benefited a large number of persons (for instance, Government clerks on small pay) without causing a proportionate diminution of revenue ; while the incidence per assessee was Rs. 29 before the passing of the Act (1902-03) and Rs. 54 in each of the two succeeding years. The continuous decrease in the uncollected balances is a satisfactory feature. During the triennium three Extra Assistant Commissioners were deputed to revise the income-tax assessment ; and the result of their labours appears to be a fairer and more even assessment, together with a gain in revenue to Government.

43. Forest Revenue.

164. [Forest revenue and expenditure have already been noticed in Chapter IV.]

44. Provincial Revenues.

Income and Expenditure.

165. The income and expenditure under the Provincial section of accounts during the past years have been as follows :—

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1902-03	14,96,350	2,25,09,616	2,14,80,846	25,25,120
1903-04	25,25,120	2,30,60,668	2,23,85,788	32,00,000
1904-05	32,00,000	2,69,82,883	2,21,75,837	80,07,046

The figures for 1904-05 are not final, but are liable to correction in next year's Administration Report. The balance of Rs. 25,25,120 at the end of 1902-03 includes a special grant of 10 lakhs made by the Government of India for outlay on special works in the following year. The balance of 32 lakhs at the end of 1903-04 includes 20 lakhs for the extension and improvement of Simla and 2 lakhs for works of public utility. The revenue classed as Provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial Rates, have been discussed above. Provincial Rates on land include the rate levied under the District Boards Act, 1883, which is noticed in the following section, and the Patwári cess, the expenditure of which is shown under Land Revenue (Local). The greater portion of the expenditure, excluding Irrigation expenditure shown in the table above, is Provincial. The wholly Imperial heads of expenditure are Assignments, Political, Political Pensions, Ecclesiastical and Salt. The Provincial settlement, which was entered into in March 1897, for the reasons stated in the report of the year before last, continued till the 31st March 1905. From the 1st April 1905 a *quasi*-permanent settlement has been entered into.

45. Local Funds.

166. The accounts for the year were audited by the Examiner of Local Fund Accounts under the system of peripatetic audit. **Audit.**

167. The closing balances on 31st March 1905 aggregated Rs. 12,74,000 as against Rs. 10,80,000 in the previous year. The balances of the District Boards of Jullundur, Siálkot and Dera Gházi Khan fell below the prescribed minimum, but no District Board overdrew its balance. **Balances.**

168. Eliminating Debt Head transactions, the total income for the year amounted to Rs. 33,59,000 against Rs. 31,68,000 in the previous year, resulting in an increase of Rs. 1,91,000. The increase of Rs. 1,38,000 under the heading Provincial Rates is due chiefly to good harvests which led to the recovery in full of the current demands and the payment of arrears due to suspensions in previous years. The increase of Rs. 69,000 under the heading Civil Works is chiefly due to the sale of shop sites in the Hissar and Ludhiána Districts. **Income.**

169. The expenditure rose from Rs. 30,89,000 to Rs. 31,81,000, an increase of Rs. 92,000. Increases of expenditure occurred under the heads Education (Rs. 44,000), due to the opening of new Primary Schools; Scientific and Other Minor Departments (Rs. 21,000); and Civil Works (Rs. 1,25,000), due chiefly to heavy expenditure in the newly created district of Lyallpur. Decreases occurred under the heads Medical (Rs. 8,000), Irrigation (Rs. 5,000), and Contributions (Rs. 86,000) attributable to the payment in 1903-04 by several District Boards of the arrear contribution due to Government. **Expenditure.**

170. Through this head the obligations of District Boards to Government and *vice versâ* are adjusted. On the receipt side there is a decrease of Rs. 14,000, which is due chiefly to the recovery of arrear contributions from Provincial by certain District Boards in the preceding year. The contributions remaining due to Government on the 31st March 1905 aggregate Rs. 92,000 against Rs. 1,02,000 shown as outstanding on the 31st March 1904. **Contributions.**

171. The total outlay on Civil Works amounted to Rs. 10,29,000 as against Rs. 9,04,000 in the previous year. The increase is due to Original Works in Lyallpur District, to repairs to roads in Gurdáspur District, to school boarding-houses in three other districts, and to establishment charges in the two new districts of Attock and Lyallpur. **Civil Works.**

172. The decrease of Rs. 8,000 in expenditure under the head Medical is due to the transfer of the Leper Asylum at Tarn Táran to the "Mission to the Lepers in the East." The recovery from the District Boards concerned of the charges for the maintenance of lepers in that asylum is now effected through the "Contribution" head. **Medical Charges.**

46. Municipal Funds.

173. The accounts for the year were audited by the Examiner of Local Fund Accounts under the system of peripatetic audit. **Audit.**

174. The balances of the several Municipalities and Notified Areas at the beginning of the year aggregated Rs. 19,48,000 and at the close of the year Rs. 20,92,000, *viz.*, Rs. 16,78,000 in cash and Rs. 4,14,000 in investments. The balances of a few Minor Municipalities and Notified Areas fell below the prescribed minimum, chiefly owing to plague. **Balances.**

175. The balance of loans outstanding on 31st March 1905 aggregated Rs. 51,52,000 against Rs. 49,23,000 on 31st March 1904. The increase of Rs. 2,29,000 represents the difference between the advances (Rs. 3,92,000) taken up during the year by certain Municipalities against the sanctioned loans and the instalments (Rs. 1,63,000) paid in repayment of loans advanced in previous years. The financial condition of each indebted Municipality was satisfactory, the closing balance on 31st March 1905 in every case having been above the minimum prescribed by Government. **Loans.**

Income and expenditure.

176. The total income and expenditure exclusive of Debt Head Transactions amounted to Rs. 51,63,000 and Rs. 52,39,000 against Rs. 49,33,000 and Rs. 52,55,000 respectively in the previous year.

Sources of revenue.

177. The revenue of Municipalities is roughly divided into three main classes,—(1) Realizations under Special Acts, (2) Revenue derived from Municipal property and powers apart from taxation, (3) Taxation. The subject of Municipal taxation has been dealt with in Chapter III.

Income under Special Acts.

178. The chief sources of income under Special Acts are from cattle-pounds, hackney carriage licenses and chaukídára tax. The total realizations under this head amounted to Rs. 41,000 as a gainst Rs. 38,000 last year. The increase is due to larger income from cattle-pounds.

Income raised from Municipal properties.

179. The total revenue derived from this source aggregated Rs. 7,06,000, showing a decrease of Rs. 41,000 compared with the previous year, which is due chiefly to the loss of school fees from certain schools which were provincialized, and partly to larger income from sales of lands in the preceding year.

Grants and contributions.

180. The income under this head amounted to Rs. 2,71,000 against Rs. 3,07,000 in the previous year. The decrease is due mainly to the re-provincialization of certain localized schools having led a reduction in the grant made by Government for the maintenance of those institutions.

Miscellaneous income.

181. The total receipts under this head amounted to Rs. 4,67,000 against Rs. 3,98,000 in the preceding year, showing an increase of Rs. 69,000. The increase has occurred chiefly under the head "Refunds of amounts drawn but not expended," which is due to the fact that the Public Works Department refunded Rs. 56,000 during the year under report to the Amritsar Municipality as the unexpended balance of the sanctioned amount for the city drainage schemes, &c., and partly to better income from sale of water, especially in Lahore, where there was an increase in house connections.

Expenditure.

182. The total expenditure of Municipalities amounted to Rs. 52,39,000, a decrease of Rs. 14,000 under the expenditure last year. An increase of Rs. 96,000 under the head General Administration and Collection Charges is spread over several sub-heads, the most important of which are office establishment, audit fees, &c. (Rs. 39,000) and refunds (Rs. 37,000). The expenditure on Public Safety aggregated Rs. 7,31,000 against Rs. 7,14,000 last year, the increase being chiefly due to improvements in Municipal lighting. Expenditure under the head Contributions decreased by Rs. 45,000, owing to a stricter application of the rule that contributions should be classified to the service heads represented by the objects for which they are made. Miscellaneous expenditure incurred at Amritsar in connection with the opening ceremonies of the Water-Works and the Victoria Jubilee Hall, added to larger payments of interest on loans, helped to increase expenditure under the head Miscellaneous by Rs. 28,000 to Rs. 3,20,000.

Expenditure on public health and convenience.

183. The expenditure charged to this head amounted to Rs. 26,75,000 against Rs. 27,90,000 in the preceding year. The decrease of Rs. 1,15,000 is due mainly to a large outlay in the previous year on Water-Works and the Victoria Jubilee Hospital at Amritsar.

Municipal expenditure on public instruction.

184. The charge under this head amounted to Rs. 6,20,000 against Rs. 6,15,000 in the previous year, showing an increase of Rs. 5,000 only. The total number of scholars on the rolls of secondary schools managed by Municipal Boards on 31st March last was 14,192, or 7,400 less than in the previous year. The number in the secondary and primary stages of instruction has fallen from 7,507 to 3,842 and 14,085 to 10,350 respectively. The decrease is due to the Board Schools at the head-quarters of districts having recently been taken over by the Government.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information and statistics will be found in the following reports and publications :—

Census.—Report on the Census of the Punjab and North-West Frontier, 1903, by H. A. Rose, I.C.S.

Births and Deaths.—
Sanitation.—
Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board and the Report on Sanitary Works for the year 1904.
Judicial and Administrative Statistics of British India, Ninth Issue, 1905, Tables XIII.

Emigration.—
Census Report, *as above*, and Financial and Commercial Statistics of British India, Tables XXXV, Twelvth Issue.

Medical Relief.—
Notes on the Annual Statements of the Dispensaries and Charitable Institutions of the Punjab for the year ending 31st December 1904.
Judicial, &c., Statistics, *as above*, Tables XIV and XV.

Report of the Punjab Lunatic Asylum for the year 1904.

Vaccination.—
Notes on Vaccination in the Punjab for the year 1904-05.
Judicial, &c., Statistics, *as above*, Tables XVI.]

47. Details of Census.

(See pages 153—160 of the Report for the year 1901-02 and the Report on the Census of the Punjab and North-West Frontier, 1902.)

48. Births and Deaths.

185. The vital statistics of the Punjab for the year 1904 are dominated by plague in even a greater degree than those of the previous year. In other respects 1904 was a healthy year. The autumn monsoon was somewhat lighter than usual; there was no serious outbreak of malarial fever such as marked the autumn of 1903, and there was very little mortality from either cholera or small-pox, the total mortality from cholera being 716 only. There was a marked reduction in the mortality under the general head *fevers*, the rate (18·82 per *mille*) being about equal to that of the healthy years 1895 to 1899. Deaths from dysentery, diarrhœa and respiratory diseases also declined. Prices on the whole were lower than in the previous year, and the crops—more especially the *rabi*—were in many districts above the average. Conditions were therefore favourable for the recovery from the heavy death-rate and somewhat low birth-rate of 1903. Statistics show, however, that the death-rate actually rose from 49·0 to 49·06 per *mille*, while the birth-rate fell from 42·9 to 41·5 per *mille*. It may be noted that plague caused no less than $\frac{2}{5}$ths of the total death-rate for the year, and the total number of deaths (396,357) is not only nearly double that of the previous year, but exceeds by 6,825, the total mortality from plague registered between October 1897 (when the first outbreak occurred) to the end of 1903. The birth-rate (41·5 per *mille*), while lower than that of the previous year (42·9 per *mille*), is practically the same as the mean average (41·4 per *mille*) recorded in the preceding quinquennial period. This

General.

average is, however, a low one, as it includes the bad years 1900 and 1901, when the birth-rate was, owing to the effects of cholera, famine and malarial epidemics, registered as 38·8 and 35·4 only. The average in the healthy year 1899 was 46·2. The Punjab birth-rate is now lower than that of the Central Provinces, the United Provinces and Bengal. The low average birth-rate in what was otherwise a distinctly favourable year is no doubt attributable to the effects of plague, but the unusual autumnal sickness of 1903 was also no doubt largely responsible. The improvement in the health of Municipal towns would appear to be due to a decrease in the mortality from fevers. The influence of the principal diseases on the vital statistics is exhibited in the mortality bill for the Province as follows:—

Deaths per mille.

Plague	19·7
Fevers	18·82
Dysentery and Diarrhœa	0·60
Small-pox	0·48
Cholera	0·04

Plague.

186. One proof of the terrible extent to which the ravages of plague have increased in the Punjab during the year is the fact that the Municipal death-rate from this disease has increased by 5·05. The plague returns for the Municipal towns (14·09 per *mille*) continue to compare very favourably with those recorded in rural circles (20·34 per *mille*), and it is noticeable that the largest urban mortality occurred in the smaller Municipalities. In the four largest towns the plague rate is again comparatively low, being only 1·29 per *mille* in Delhi, 9·37 in Lahore, 6·85 in Amritsar, and almost *nil* in Multán. There seem good grounds for the conclusion that the infant population remains unaffected by plague; and that in badly-infected districts the Hindu mortality is generally less than that of Muhammadan. Siálkot affords the only exception. During the year there were epidemics of plague in 26 of the 29 districts of the Punjab, the districts of Kángra, Miánwáli and Muzaffargarh alone escaping with a few imported cases of plague. Eight Native States suffered from outbreaks of plague during the year; and the most marked increase occurred in the Ludhiána, Gurdáspur, Gujrát and Shahpur Districts, while the Gujránwála and Lahore Districts experienced a marked decrease. During the year under report 49,107 inoculation operations were performed in British districts as against 327,357 operations last year,—in the case of inoculated persons the percentage of deaths being 70·63, while among uninoculated the percentage was as high as 83·90. No special measures were taken for inducing the people to submit to inoculation, and the operation was performed almost solely in response to the spontaneous demands of the people. The people, however, remained on the whole apathetic in their attitude to the precautions advocated by Government. The inoculations were comparatively few; the isolation of the sick and separation of contacts were seldom resorted to; and the inhabitants of uninfected villages in very few cases exercised their right to exclude persons coming from infected centres. The result of an experiment in the destruction of rats on a considerable scale in the Delhi District is awaited with interest.

Fevers.

187. The marked reduction in the mortality registered under the head of fevers has already been referred to. A heavy monsoon rainfall in the Province is always followed by a severe epidemic of malarial fevers; and in many of the districts the monsoon rainfall during the year was vers scanty. Trial measures regarding the destruction of mosquitoes continue to be carried on in the selected towns of Gujránwála and Gujrát, but the prevalence of plague again interfered with the operations.

49. Emigration and Immigration.

(There is nothing special to report under this heading.)

50. Medical Relief.

General.

188. The Report on Dispensaries and Charitable Institutions this year deals with the triennium 1902—1904. The number of dispensaries dealt with is 371 as against 358 last year. The difference is due to inclusion of a number of private aided dispensaries, the Local Fund dispensaries having actually decreased from 239 to 236. The number of in-patients treated is slightly below that of last year, but the difference is not sufficient to call for detailed comment. The decrease in the number of malarial patients affords the best test of the healthiness of the year. As regards the figures dealing with treatment of in-door patients, it is satisfactory to note the decline of the death-rate from 4·28 to 3·42. The number of out-patients is somewhat less than in 1903; but considering the healthiness of the year, a more considerable decrease might have been expected. Proof of the growing popularity of the dispensaries is afforded by the figures showing the number of eye-cases treated; the number of patients treated for diseases of the eye being no less than 16 per cent. of the total number of persons attending the hospitals. The numbers of women and children patients continue to show an increase; and the attendance of women at general dispensaries compares favourably with that at the purely female hospitals where these institutions exist side by side. The number of operations were 172,443 as against 162,396 during the previous year, this increase being apparently largely due to minor operations; while the most satisfactory feature is the increase in the number of operations for cataract and the percentage of successes. The total income of the hospitals and dispensaries was Rs. 7,52,027; the total expenditure Rs. 6,77,207; and the number of beds available was 3,172, of which 2,154 were for men and the remainder for women. The following tables show the daily average attendance of in-patients and out-patients during the triennial period:—

In-patients.

	1902.	1903.	1904.
Men	1,242·43	1,311·74	1,354·21
Women	338·16	387·39	432·39
Children	104·18	114·43	137·81
Total ...	1,684·77	1,813·56	1,924·41

Out-patients.

1902	19,736·04
1903	21,645·82
1904	21,528·30

New Hospitals.

189. The work at Jullundur, the Mayo Hospital at Lahore and Simla (Ripon Hospital) is progressive. The Jullundur Civil Hospital leads the way in cataract operations; while the Multán Civil Hospital heads the list for operations for calculus. New hospitals are in contemplation at Hissar, Rohtak and Jullundur; and it is hoped that at Simla a contagious hospital for Europeans will be ready during the current season. It has not yet been found practicable to occupy the new hospital at Amritsar, the drainage still requiring attention. The construction of the Victoria Memorial Hospital in the Gujránwála District has been sanctioned; and a building grant of Rs. 25,000 for the enlargement of hospital buildings has been made by the Punjab Government on account of the North Indian School of Medicine for Native Christian Women at Ludhiána. Classes for *dháis* at Lahore, Amritsar and Multán, in connection with the Victoria Memorial Scholarship Fund, were in existence throughout the year.

Leper Asylums.

190. There are 6 Leper Asylums in the Province; of which three have been transferred to the control of the Mission to Lepers in the East in consideration of annual provincial contributions. The number of lepers treated during the year was 558; 31 are said to have been discharged benefited, 57 died and 101 left of their own accord.

Pasteur Institute.

191. The Pasteur Institute at Kasauli treated 248 European and 364 Indian patients, with only 5 failures (all natives).

Lunatic Asylum.

192. The population of the Punjab Lunatic Asylum (705 inmates) continues steadily to rise. The fall in the total expenditure from Rs. 1,29,972 to Rs. 73,302 is due chiefly to the considerably smaller expenditure on Public Works.

Chemical Examiner.

193 There has been a marked increase in the number of cases referred to and analyses performed by the Chemical Examiner during the year. This increase, however, has been accompanied by a decrease in the ratio of detection, both in human and cattle poisoning cases, apparently due partly to a lack of discrimination in a number of the references made. Arsenic is still the favourite poison in the Province, having been used in 56 per cent. of the human cases and in over 91 per cent. of the cattle-poisoning cases detected.

51. Sanitation.

Sanitary Board.

194. The Sanitary Board met four times during the year, and various important projects and schemes were considered and approved, and were forwarded to the Local Government for sanction—among them being the Sargodha Water-Works Scheme, a scheme for improving the drainage of certain sections of Amritsar City, the Jhelum Drainage Scheme, the Ambála Intramural Drainage Scheme, and the Drainage Scheme of Muktsar. Other projects considered were the Chiniot Drainage Scheme and a Suburban Drainage Scheme for Delhi. During the year the Amritsar Water-Works (estimated cost 10½ lakhs) were completed, and were opened by His Honour the Lieutenant-Governor. Good progress has been made in adopting measures for preventing the excessive use of water and for checking loss by waste from the Simla Water-Works; while recommendations have been forwarded to the Government of India in connection with a hydro-electric installation to increase the water-supply of Simla and light the station with electricity. Satisfactory results have been given by the septic tanks in use at Simla; where the sewage extension works have been practically completed. An enquiry made into the cause of an outbreak of an enteric fever in that station during October resulted in the conclusion that the outbreak could not be ascribed to any defect in the station's water or drainage works. With a view to pushing on the different sanitary schemes projected in Lahore, a second Public Works Department Division has been formed there, and the work of draining and improving the Lahore Mall has been put in hand. The Intramural Drainage Works for Delhi and Ambála have been commenced; the Gojra and Toba Tek Singh Water-supply and Drainage Works and the Dharmsála Water-Works are still under construction. It is disappointing to note the small amount of interest taken by the Municipal Committees in the important matter of sewage disposal. Good work has been done in the clearing and repairing of wells, and a large number of villages have been supplied with sanitary note-books. The absence of competition, however, for rewards and *khillats* for improved village sanitation shows that the rural population have yet to realise that cleanliness is one of the most powerful enemies of plague.

52. Vaccination.

Vaccination.

195. The Punjab Vaccination Report this year deals with the triennial period ending 1904-05. As has already been remarked, there was very little mortality from small-pox during the year, but the number of vaccinations have increased over last year's figures by 34,666. The figure of chief interest is the increase in the number of re-vaccinations,—137,752 against 84,918 in the first year of the triennium. The average cost of each successful operation was the same as last year,—two annas four pies. The returns of vaccinations in Municipalities in which the Act is in force show that about 73 per cent. of the 'available' children under one year of age were vaccinated.

CHAPTER VII.
INSTRUCTION.

[Detailed information on the subject of Education will be found in the Annual Reports on Public Instruction in the Punjab and in the statistical tables appended thereto, also in the tables under X—Education in the yearly volumes of Judicial and Administrative Statistics of British India published by the Director-General of Statistics. Under heading XII of the same volume statistics of printing presses and newspapers are given.]

53. General System of Public Instruction.

Public Instruction.

196. The general system and history of Public Instruction in the Punjab was explained in the report of 1901-02 (paragraphs 616—635). It will not be treated again till 1911-12.

54. Education.

General Summary.

Total figures.

197. The number of public institutions was 3,302 against 3,246 with 199,039 pupils as against 194,915 in the previous year. These include 246 institutions in Native States with 14,303 pupils and 3,056 institutions with 184,736 pupils in British Territory. The number of institutions in Native States has fallen by 1 and the number of pupils by 449, while in British Territory there has been an increase of 57 institutions and 4,573 pupils. The number of private institutions has fallen by 77 from 4,701 to 4,624 and the number of pupils by 391 from 76,315 to 75,924; of these, the schools in Native States have fallen by 104 from 861 to 757 and the number of pupils by 677 from 8,844 to 8,167. In British Territory the schools have increased from 3,840 to 3,867 and the pupils from 67,471 to 67,757. The number of pupils under instruction in schools and colleges for girls in British Territory has fallen by 55 from 25,677 to 25,622, and in Native States by 289 from 1,867 to 1,578. The number of institutions of all kinds is 7,926, or 21 less than in the previous year, but the number of pupils has risen by 3,733 from 271,230 to 274,963.

Colleges.

198. There are 18 colleges for males, of which 4 are in Native States. Of the Arts Colleges (English), the 10 in British territory have 1,196 students, or 11 more than in the previous year, while the 3 in Native States have 67 students against 61 in the previous year. The Oriental College, Lahore, had 86 students against 79, and the Oriental Department of the Patiála College had 29 against 35 in the previous year. The Law College had an increase of 37 students from 133 to 170; the Medical College an increase of 40 from 234 to 274; and the Central Training College an increase of 42 from 127 to 169. St. Bede's Training College for Women had 16 students.

Secondary Schools.

199. The number of schools has fallen by 5 from 379 to 374, but the number of pupils has risen from 67,509 to 67,788. In British Territory the schools have fallen from 326 to 321, but the number of pupils has risen from 59,654 to 60,293; the number of boys' schools has fallen from 291 to 286, while the number of pupils increased from 56,749 to 57,270; the number of girls' schools continues to be 35, while the number of pupils increased from 2,905 to 3,023. There are, as before, 53 schools in Native States, but the number of pupils has fallen from 7,855 to 7,495.

Primary Schools.

200. The number of schools has increased from 2,822 to 2,878 and the number of pupils from 123,048 to 126,224. In British Territory the schools increased from 2,633 to 2,690 and the pupils from 116,261 to 119,516. The number of boys' schools increased by 49 and of pupils by 2,976, while the number of girls' schools increased by 8 and of pupils by 279. In Native States the number of schools decreased by 1 from 189 to 188 and of pupils by 79 from 6,787 to 6,708.

Special Schools.

201. The number of these schools has risen from 27 to 31 and pupils from 2,504 to 3,020. Of these, 30 schools and 3,016 pupils are in British Territory and 1 school with 4 pupils in a Native State. The schools for boys in British Territory have increased from 20 to 21 and the number of pupils from 2,212 to 2,495; the number of schools for girls has increased from 6 to 9 and the number of pupils from 278 to 521.

Private Institutions.

202. In British Territory the number of schools for boys has increased by 64 from 3,264 to 3,328 and of pupils by 997 from 57,727 to 58,724; the number of schools for girls has fallen by 37 from 576 to 539 and of pupils by 711 from 9,744 to 9,033. In Native States the number of schools has fallen by 104 from 861 to 757 and of pupils by 677 from 8,844 to 8,167. The number of schools has, on the whole, decreased by 77 and of the pupils by 391.

Expenditure.

203. The total expenditure on institutions of all kinds in British Punjab during 1904-05 rose from Rs. 39,18,070 to Rs. 41,06,320. This was provided from the following sources :—

	Rs.
Imperial Government	1,26,573
Provincial Government	14,13,249
District Boards	6,32,323
Municipalities	3,43,909
Fees	9,62,633
Other Sources	6,27,633

The contribution from the Provincial Government was Rs. 84,517 more than in the previous year.

Fees.

204. The income from Fees was Rs. 9,62,633, of which Tuition Fees amounted to Rs. 7,40,101 and Other Fees to Rs. 2,22,532. There was an increase of Rs. 14,237 under Tuition Fees and a decrease of Rs. 29,694 under Other Fees, due to the abolition of the Anglo-Vernacular Middle School Examination. The expenditure was 23·4 of the total cost of education.

PUBLIC EXAMINATIONS.

Arts Examinations.

205. In the Intermediate (Arts) 254 passed out of 558, or 45·5 per cent., against 232 out of 505, or 45·9 per cent. last year. On the Science side 12 passed out of 24 against 14 out of 26, and on the Oriental side 4 passed out of 5 against 1 out of 3. In the B. A. Examination 293 candidates appeared and 157 passed, or 53·6 per cent., against 273 and 128, or 46·8 per cent. last year. In the B. O. L. Examination 2 passed out of 4 against 2 out of 3. In the B. Sc. Examination 4 passed out of 5 against 3 out of 5. In the M. A. Examination 21 passed out of 40 against 18 out of 36. In the M. O. L. Examination one candidate went up and passed. In Arts the total number of candidates was 930 and of passes 455 against 825 and 384, respectively. Of College candidates 380 passed out of 704 against 344 out of 664. Of private candidates 75 passed out of 226, or 33·2 per cent., against 54 out of 187, or 28·8 per cent.

Oriental Language Examinations.

206. In these examinations 295 passed out of 568 against 228 out of 444.

General progress.

207. The general character of instruction is improving along with the improvement in the calibre of the teachers and the supply of necessary furniture and appliances. The suggestions of inspecting officers are receiving more attention, and the rules of recognition have proved a boon to private enterprise.

TRAINING INSTITUTIONS.

Number of institutions.

208. The Training Institutions are the Central Training College, Lahore, for the training of English Masters for all departments of schools, and of Vernacular Teachers for Secondary Departments; a Normal School at Lahore, Delhi, Multán, Jullundur and Ráwalpindi, where male teachers are trained for appointments in Primary Schools and Departments; a Normal School for Women at Lahore, which trains for appointments in Primary Schools; and St. Bede's College, Simla, for the training of female teachers for European Schools. There

are also training classes for girls attached to several schools. The Central Training College and the Normal School for Women are under the immediate control of the Director, the other Normal Schools are under the control of the Circle Inspectors with the exception of that at Lahore, which is under the Principal of the Central Training College, who also visits the other Normal Schools.

The Central Model School.

209. This school maintains its popularity and efficiency. The number on the rolls rose from 766 to 811, and the income from fees from Rs. 12,675 to Rs. 13,348. The results of the public examinations were on the whole good, and especially so in the case of the Entrance (Arts and Science Faculties). In the Clerical and Commercial Examination, held for the first time in connection with the Central Model School, 7 boys passed out of 12. The Sime Athletic Shield was again won, and Physical and Moral training have, as usual, received careful attention.

Agriculture, Mensuration and Drawing.

210. This branch of study in the Normal Schools still requires a considerable amount of attention. Improvement is shown, however, in the quality of the work done and in the greater facilities in the way of land and water. The Inspector, Delhi Circle, makes no mention whatever of this work. This is probably due to the fact that the school has not yet occupied the new buildings. The Principal, Central Training College, notes that the work done in the Jullundur Normal School is the best in the Punjab. The general method of instruction in addition to practice in ploughing, sowing, weeding and watering is to train the students by observation and the keeping of journals in which they enter the results of their work. Practical Mensuration has received greater attention, and is reported on as having improved. In Ráwalpindi the students are taken out once a fortnight for field work. In Drawing, for the Junior Drawing Masters' Certificate, Lahore again stands easily first with 32 students passing and 43 certificates being gained. Ráwalpindi passed 24 students and gained 29 certificates. Jullundur must be reckoned as standing second in order of merit with 22 students passing and 35 certificates gained. Multán passed 18 students and gained 24 certificates. Delhi passed 11 students and gained 14 certificates in Drawing.

The year's progress.

211. The masters of the Central Model School gave 101 observation lessons, and also criticised over 2,000 lessons. The College drawing apparatus has been increased and the staff is now complete. About 300 books, recently published on pedagogic subjects, were added to the College Library, which is now being properly classified and catalogued. A great advance has also been made in the provision of Science apparatus during the year, and with the completion of the Laboratories, the Lecture theatre, dark room, workshop, etc., the College possesses exceptional facilities for the teaching of Science. A Kindergarten exhibition in connection with Prize Day attracted much attention. A course of lectures on Physiology and Anatomy was given by Rái Bahádur Doctor Beli Rám in connection with the St. John's Ambulance Association. The building extensions have been finished, and an oil-gas apparatus has been fitted up. For the first time students were presented for the B. T. Degree. The College Debating Club continues to flourish ; and the Library has been more extensively used. The Lahore Normal School has entered its new quarters. The Central Hall, flanked by the class-rooms, library and offices, makes it the finest building of its kind in the Province. The new buildings for the Normal School in Delhi have been completed. In the College the number of students rose from 127 to 169, and in the Normal Schools from 248 to 363. The certificate examination results have been very good. In the College not one of the 162 candidates failed in the practice of teaching, and 98 per cent. passed in the professional subjects. All the candidates for the B. T. Examination passed.

Training of Female Teachers.

212. The Normal School for Women began work in January of the current year. There were 40 students on the rolls in March. Besides this institution there are also Normal Classes in five girls' schools. Fifteen students passed the Certificate Examination.

Supply of trained teachers.

213. The supply of trained teachers is still inadequate. To meet the demand for teachers in Primary Schools, Normal School students were, as a provisional measure, admitted to the certificate examination at the end of the first year's training.

PROFESSIONAL EDUCATION.

Law.

214. There has been a decided increase in the number of students, there being 170 on the rolls at the close of the year as against 133 in the previous year.

Medicine.

215. The medical profession continues to attract students. The number of students in the College Department has increased by 40 and in the School Department by 17. At the request of the Burma Government 40 students were admitted from that Province.

Medical training of women.

216. The North India Medical School for Christian Women, Ludhiána, had 43 students on the rolls. Besides the regular examinations conducted by the school, 9 students passed in various examinations in connection with the Medical College, Lahore.

Native systems of medicine.

217. These systems are taught in the Madrassa-i-Tibiya, Delhi, and in the Dayánand Anglo-Vedic and Islámia Colleges, Lahore; but there has been a marked falling off in the number of students in attendance.

Veterinary College.

218. There were 153 students on the rolls as against 128 in the previous year. The examination results have been very satisfactory. A class for transport officers and a post-graduate course in contagious diseases were both well attended.

TECHNICAL EDUCATION.

Mayo School of Art.

219. The number of students on the rolls has risen from 302 to 333. The examination results have been very satisfactory. Of the students who have passed out, 21 are now employed on salaries ranging from Rs. 20 to Rs. 80. The Principal is of opinion that the time has come for the establishment of a Boarding-house in connection with the School.

The Engineering Class.

220. This class, which is under the control of the Punjab University, has 57 students on the rolls against 43 last year. In the Civil Engineering Examination 12 passed out of 22. Of the students of this class, 13 are now employed on salaries ranging from Rs. 25 to Rs. 160. In the First Examination in Civil Engineering 26 passed out of 49 as against 42 out of 46 last year.

Law Examinations.

221. In the Preliminary Examination 22 out of 32 were successful as against 44 out of 54 in the previous year; in the First Certificate Examination 12 out of 24 against 8 out of 16; in the Licentiate Examination 11 out of 19 against 9 out of 17; in the Intermediate Examination 18 out of 24 against 9 out of 11; and in the LL.B. Examination 10 out of 41 against 22 out of 50.

Medical Examinations.

222. In the Preliminary Scientific Examination 48 passed out of 78 as against 42 out of 73 last year. In the First L. M. S. and M. B. Examinations 26 passed out of 61 against 20 out of 40, and in the Second L. M. S. and M. B. Examinations 16 passed out of 26 against 22 out of 25. Three female students appeared in the Senior and Junior Examinations of the Certificate Class and all passed. In the Junior Examination for Hospital Assistants 78 passed out of 84 against 61 out of 83, and in the Final Examination 71 passed out of 104 against 58 out of 84.

Entrance Examination.

223. Excluding private candidates, the total number of candidates for the Entrance Examination was 2,161, of whom 1,144, or 52·9 per cent., passed, against 989, or 50·9 per cent., out of 1,942. On the Arts side 1,077 passed out of 2,026, in Science 17 passed out of 23, and on the Oriental side 5 passed out of 5. In the High Standard Examination for European Schools 14 passed

out of 33, and in the Calcutta Entrance 4 passed out of 12. In the Clerical and Commercial Examination 27 passed out of 62.

Middle Standard Examination.

224. In the Middle Standard Examination for Natives, 1,114 passed out of 1,516, and for Europeans 46 passed out of 70. As the previous year's figures contained the results of the Anglo-Vernacular Middle School Examination which is now abolished, the figures for the year under report are not compared with those of the previous year. The number of candidates in the Entrance and equivalent examinations was 2,635, of whom 1,253, or 47·5 per cent., passed, and for the Middle Standard Examination 1,674, of whom 1,203, or 71·9 per cent., passed. No candidate appeared in English only.

UNIVERSITY EDUCATION.

University Convocation.

225. The twenty-fourth Convocation of the Punjab University was held in the Montgomery Hall on the 23rd December 1904, when 178 graduates were admitted to the various degrees as compared with 162 in the previous year—2 to the degree of B. O. L., 18 to M. A., 131 to B. A., 3 to B. Sc., 22 to LL. B., and 2 to the degree of Bachelor in Medicine.

Measures of the year.

226. Government sanctioned a Regulation permitting a B. Sc. to proceed to the degree of M. A. in Mathematics or Science. Sanction to all other changes in the Regulations was withheld in view of the revision of the Regulations to be made by the new Senate appointed under the Indian Universities Act of 1904.

Arts Colleges.

227. At the close of the year there were 15 Arts Colleges—13 English and 2 Oriental. Of these, 11 are in British Territory, 1 being under Government and 10 under private management; 9 are first grade and 2 second grade. Of the 4 colleges in Native States, 2 are first grade and 2 second grade.

Professonal Colleges.

228. There are four professional colleges in the Punjab: the Law College under the direct control of the Punjab University; the Medical College and the Central Training College, both under the control of Government; and St. Bede's Training College for Female Teachers, under private management.

Number in Arts and Professional Colleges.

229. The total attendance in Arts (English) Colleges in British Territory rose from 1,185 to 1,195. In the First Year Classes there were 372 against 382; in the Second Year 440 against 418; in the Third Year 150 against 153; in the Fourth Year 195 against 192; and in the M. A. Classes 39 against 40. The number of students in the Arts Colleges of Native States remains 96. In the Professional Colleges the number rose from 494 to 629.

Oriental College, Lahore.

230. The number of students rose from 120 to 136,—86 against 79 in the College Department and 50 against 41 in the School. Instruction was also given in Oriental Languages to 109, against 117, students of the Government College. The staff of the college continues its work of translation and the production of text-books.

SECONDARY EDUCATION (BOYS).

Number and distribution of schools and pupils.

231. The total number of Anglo-Vernacular and Vernacular Secondary Schools has fallen from 291 to 286. The Anglo-Vernacular Schools have fallen from 179 to 177 and Vernacular Schools from 112 to 109. There has been an increase of 3 Anglo-Vernacular High Schools; the number of Vernacular High Schools remains the same. The number of Anglo-Vernacular Middle Schools has fallen by 5 and of Vernacular Middle Schools by 3. Altogether there are 85 Government and Board Secondary Anglo-Vernacular Schools against 83 last year, 63 Aided against 61, and 29 Unaided against 35; there were also 107 Vernacular Board Schools against 110, and 1 Aided and 1 Unaided Vernacular School as in the previous year. The number of pupils in the Secondary stage of instruction fell from 20,729 to 20,570, showing an increase of 86 in the Anglo-Vernacular and a decrease of 245 in the Vernacular Schools. The number of pupils reading in the Secondary Stage of Government and Board Schools has risen by 157; in Aided Schools by 28; and in Unaided Schools has fallen by 344. The number learning English has risen from 15,595 to 15,651, and the number of agriculturists has risen from 4,458 to 4,510.

PRIMARY SCHOOLS (BOYS).

Number of schools and pupils.

232. The number has risen from 2,298 to 2,347, of which 1,661 are Government and Board Schools, 550 are Aided and 136 Unaided. Government and Board Schools have increased by 21 and Unaided Schools by 33, while Aided Schools have dropped by 5. The number of pupils rose from 103,511 to 106,487, of whom 17,155 are in the Upper Primary stage and 89,332 in the Lower Primary stage. The returns for agriculturists show an increase of 1,123 from 49,827 to 50,950. Certain classes of schools, though included in these figures, are reported on separately because of their special character.

Expenditure.

233. This rose from Rs. 4,69,110 to Rs. 4,77,082, or, including Primary Departments in Secondary Schools, from Rs. 8,09,181 to Rs. 8,48,451, showing an increase of Rs. 39,270. Public Funds contributed Rs. 5,19,185, an increase of Rs. 20,209; Fees contributed Rs. 2,26,630, an increase of Rs. 8,500; and Other Sources contributed Rs. 1,02,636, an increase of Rs. 10,561.

Fees.

234. In Primary Schools proper the fees rose by Rs. 2,738 from Rs. 69,721 to Rs. 72,459; Aided Schools show an increase of Rs. 1,535; and Unaided Schools an increase of Rs. 450.

Zamindari Schools.

235. These schools have been increased by 5 from 192 to 197, and the number of pupils by 549 from 5,695 to 6,244, of whom 848 against 867 are in the Upper Primary stage and 5,396 against 4,828 are in the Lower Primary stage. Of the 50,950 agriculturists reading in Primary Schools, 4,153, or an increase of 224, are in Zamíndári Schools. In 188 of these schools Urdu is the medium of instruction; in 8 schools of the Delhi Circle and in 1 of the Amritsar Circle the medium is Nágri. Inspectors report that the new Scheme of Studies for Rural Schools will do much to popularise elementary education among the masses.

General Remarks.

236. There has been an increase in the number of schools and of pupils and a corresponding increase in revenues from Fees and Other Sources. There were 99 new schools opened with 1,839 pupils. Of these, 8 schools were for girls with 182 pupils. In the Ráwalpindi District 40 schools were opened for co-education, having 608 pupils. The expenditure incurred on account of these new schools was Rs. 17,326. It may be noted here that, in furtherance of the wishes of the Supreme Government in the matter of the spread of elementary education among the masses, about 600 Primary Schools have been opened since the close of the year under report. The quality of the teaching and the qualifications of the teachers are both improving. Though much remains to be done, a great advance has been made in the equipment of these schools, and many of the buildings have been improved or abandoned for better ones. The chief needs are materials for object lessons and apparatus for practical mensuration.

Railway Technical School, Lahore.

237. There were 399 students on the rolls against 441 last year. All the students, infants excepted, learn Drawing, 319 are in the Carpentry Classes, and 80 learn Smith's work. The results of the various examinations were fair on the whole. The school buildings, which were extended last year, are still insufficient. Thirteen students have joined the Mayo School of Art, 11 have gone to ordinary schools, and of the remainder all but 12 have secured employment. Evening classes are held three times a week for the benefit of artisans and apprentices from the North-Western Railway Workshops.

Industrial Schools.

238. Industrial Schools are maintained by the Municipalities of Amritsar and Delhi, by the District Board of Ludhiána and by several Mission and Charitable Associations.

Clerical and Commercial Classes.

239. The number of students in the Clerical and Commercial School, Amritsar, rose from 59 to 68. Out of the 34 candidates for the University Examination 13 were successful. The school is still deficient in appliances and staff. Only 5 students obtained appointments this year. The class in the Government High School, Rewári, presented no candidates for examination.

The classes in the Mission School, Ráwalpindi, had 21 pupils against 26 last year. Of 14 sent up for examination 7 passed against 3 out of 9 last year. Only 2 have obtained employment. At Gujránwála there were classes in the Mission School which are now closed, and in the Khálsa High School which sent up 2 candidates, both of whom failed.

Female Education.

Number of schools and pupils.

240. The number of Secondary Schools is 35, the same is in the previous year, but the number of pupils has risen from 618 to 657. The number of Primary Schools has risen from 335 to 343, and of pupils from 15,037 to 15,395.

Examination results.

241. For the Entrance Examination 28 passed out of 46 against 38 out of 49. For the Middle School Examination 44 passed out of 83 against 45 out of 74 (excluding Anglo-Vernacular candidates) in the previous year. In the Middle Standard Examination for Native Girls on the Anglo-Vernacular side 9 passed out of 10 against 3 out of 3, and on the Vernacular side 26 passed out of 32 against 32 out of 38. In the Upper Primary Examination 329 passed out of 455 against 307 out of 414, and in the Lower Primary 812 passed out of 1,262 against 815 out of 1,200. During the year under report there was no Anglo-Vernacular Middle School Examination and no Primary School Examination for European Schools.

Domestic Economy, Needlework and Physical Training.

242. In the American Mission Schools at Siálkot, Pasrúr and Palwal the girls are grouped into "families," and thus instruction in cookery is rendered not only possible, but highly practicable. This training is practically confined to Christians. Needlework is well taught in Christian boarding schools and in schools having Christian teachers. Muhammadans generally show skill in white embroidery, while Hindús, with few exceptions, care little for needlework of a plain kind. Physical training is practically neglected, the general explanation being the strong feeling of parents against it. The Inspector of Ráwalpindi Circle suggests that some of the indigenous games practised in the home might be selected for general practice in schools.

General progress.

243. During the past few years there has grown up a new and strong movement in favour of female education. One sign of progress is the desire on the part of educated men to have their wives and daughters learn something more than the Vernacular Middle Course gives. A number of Indigenous and Industrial Christian Schools has been opened. The demand for schools is spreading and will usually spread from the centres where schools are already firmly rooted. The schools which has been most prosperous are those at Multán, Dera Gházi Khan, Shahpur and Montgomery, where a real interest in the schools exists. Improvement in this respect might be shown in the districts of Lahore, Amritsar, Siálkot, Gujránwála and Jullundur, where the local funds are insufficient. The supply of teachers is still insufficient; but it is hoped that the Normal School for Women will supply this want in the near future.

Education of Particular Classes.

European Schools.

244. The number of public schools for Europeans continues at 36, while the number of pupils has increased from 2,508 to 2,627. Of these, 16 schools are for boys with 1,161 pupils, and 20 for girls with 1,466 pupils. There are also two private schools with 16 pupils. The number of pupils in the Secondary stage of instruction is 830,—389 boys and 441 girls, and in the Primary stage 1,797,—827 boys and 970 girls. Industrial and Technical instruction continues to be given in several of the schools, but there is no institution devoted to this work. The examination results were good. In the High School Examination the Park School, Simla, heads the list for boys, and Ayrcliff School, Simla, for girls; in the Middle School Examination the Lawrence Military Asylum, Sanáwar, heads the list for boys, and Auckland House School, Simla, for girls. St. Bede's Training College for Women has completed the first year of its existence.

Muhammadans.

245. The number of Muhammadan boys under instruction in Public and Private Institutions rose from 101,612 to 104,267, *i.e.*, by 2·5 per cent., and of Hindús from 96,356 to 97,543, *i.e.*, by 1·2 per cent., and of Sikhs from 19,919 to 20,880, *i.e.*, by 4·6 per cent. In Public Institutions Muhammadans have increased by 2·4 per cent., Hindús by 2·1 per cent, and Sikhs by 3 per cent. The percentage of school-going age in Public Institutions is for Muhammadans 7·64, for Hindús 12·61, and for Sikhs 13·79; the corresponding figures for institutions of all kinds are 12·08, 15·24 and 16·31, respectively.

The number of Muhammadan girls in Public and Private Institutions fell from 11,243 to 10,522, while that of Hindús rose from 8,698 to 9,319, and of Sikhs from 2,876 to 2,922. In Public Schools there was an increase of 28 Muhammadans, of 536 Hindús, and of 9 Sikhs. The fall in the number of Muhammadans was in Private Schools. The percentage of girls of school-going age attending all kinds of schools for Muhammadans was 1·38 against 1·47, for Hindús 1·72 against 1·61, and for Sikhs 2·94 against 2·89.

The total for Muhammadans receiving instruction is now 114,789 against 112,855, showing an increase of 1,934, or 1·7 per cent. It is worthy of remark that the increase in attendance at Private Schools for Muhammadans is considerably less than that of last year in the case of boys, and in the case of girls there is a decided falling off. This would seem to indicate a change in the attitude of Muhammadans with regard to education in general and female education in particular.

The Aitchison Chiefs' College.

246. The number of pupils on the rolls at the close of the year rose from 69 to 71. Seven boys (of whom one was not a candidate for the Diploma) took the newly established Diploma Examination for Chiefs' Colleges, and three the Entrance Examination. During the year 13 boys left and 15 joined the institution, against 20 and 22, respectively, last year. The average age of boys entering the College during the past year was 12¼ years, which is distinctly promising from the point of view of the development of character. Steps have been taken to give effect to the reforms for Chiefs' Colleges suggested by the Ajmer Conference. A considerable change has been made in the curriculum on the lines of the proposals of the Ajmer Conference. Law and Political Economy have been introduced into the course of studies of the two highest classes, and it is hoped that Revenue may also find a place in the curriculum during the coming year. Science and a classical language have been made alternative, and the time thus gained has been devoted to the additional teaching of English. A feature of the work is that each form has now the benefit of English teaching by Europeans.

Private Schools.

247. The number of schools has fallen from 4,701 to 4,624, and the number of pupils from 76,315 to 75,924. Of these, 2 schools are for Europeans with 16 pupils, and 636 for girls with 9,847 pupils, showing a decrease of 80 schools and 953 pupils. Vernacular schools for boys and girls and rote schools for boys show an increase of over 1,000 pupils; the decrease is in advanced schools, other schools, and rote schools for girls. In British Territory the schools have increased by 27 and the pupils by 286; in Native States they have decreased by 104 schools and 677 pupils. The number of schools examined for grants rose from 592 to 614 with a rise in the number of pupils from 21,532 to 21,622. The grants earned also rose from Rs. 36,681 to Rs. 37,094 as a result of better work. The results of all the Standard Examinations show an increase of 173 in the number of passes.

MISCELLANEOUS.

Native States.

248. If the Oriental Department of the Patiála College be reckoned as distinct from the Arts College, there are four colleges in Native States, the others being in Baháwalpur and Kapúrthala. The number of students is 96 as in last year. The number of Public Schools is 242 against 243 last year. There are 53 Secondary Schools with 7,495 pupils against 53 schools and 7,855 pupils, there being a decrease of 368 pupils in the Anglo-Vernacular

Schools. There are 188 Primary Schools with 6,708 pupils against 189 schools with 6,787 pupils. There is also one special school with 4 pupils against 14 pupils last year. The number of Indigenous Schools has fallen from 861 to 757 and the number of pupils from 8,844 to 8,167.

Moral training and discipline.

249. In denominational and Mission Schools religious instruction is compulsory. In all Secondary Schools teachers' associations, students' clubs and debating societies are maintained. The use of unfair means in examinations is becoming more rare. The closer observance of inter-school rules is also worthy of notice. The personal influence of teachers deserves special notice. The Inspectors without exception remark on the superior tone of schools where the staff is fully qualified. This is evident on the play-ground as well as in the class-room.

Boarding-houses.

250. There were 293 boarding-houses with 11,417 in residence, against 294 and 10,470, respectively, last year. Of these, 269 were for males with 10,027 in residence, and 24 were for females with 1,390 in residence. These include 22 boarding-houses for Europeans, 7 for males with 597 in residence and 15 for females with 907 in residence. Government maintains 42 boarding-houses in connection with the Government College, the Central Training College, the Central Model School, the Normal Schools at Lahore, Jullundur, Delhi, Ráwalpindi and Multán, the Normal School for Women, Lahore, and the High Schools recently taken over by the Department. Local Bodies maintain 148;—43 are aided and 60 are unaided. The management and equipment generally are satisfactory, but in no Circle is the accommodation adequate. The arrangements for furniture, in-door amusements, light and healthy literature are the chief wants in these institutions.

Educational Conferences and Exhibition.

251. There were no Conferences or Exhibitions during the year under report, but three Conferences were held early in the current year, and will be reported on in next Annual Report.

The Conferences were on—

(1) Commercial Education;

(2) Female Education;

(3) Departmental work.

55. Literature and the Press.

Literature.

252. The total number of books and periodicals published during the year was 1,484 as against 1,478 last year. Urdu heads the list of publications with 614; Punjábi comes second with 455; and English third with 105. Of the total number, 152 are periodicals; and the past year generally furnishes evidence of growth and development. Religion continues to be a subject of special interest. Mention must be made of the "Tafsír-ul-Qurán," an instructive commentary on the Qurán, written with the special view of meeting the attacks made by young thinkers against the teaching of the Qurán. The departments of literary activity in which the influence of Western ideas is most apparent are biography, history and fiction,—the biographical publications including a comprehensive life of Her Majesty the late Queen-Empress and of the Prince Consort; Memoirs of the late Amír Abdur Rahmán of Kábul (translated from English by an Indian officer attached to the English Consulate in Persia), a work interesting on account of the light it throws on the social and political state of modern Afghánistán; and several well-written biographies of Eastern and Western celebrities—Alexander the Great, Alfred the Great, Gautam Budha, and Muhammadan men of letters of the times of the Caliphs. The kindred subject of history is represented by two works of great merit,—a history of Muhammadan civilization and a work on the "Rise and Development of the British Empire in India." The novel as a form of literature continues to be more and more popular; and one in every three books is a book of poems. The "Zamíndára Bank," by an officer of the Revenue Department, is a thoughtful work on the vexed question of agricultural indebtedness. The

Punjab Text-Book Committee and the Punjab Religious Book Society are engaged in the diffusion of useful literature in the vernacular; and the number of books, the copy-right of which has been registered during the year, is 165 against 179 in the year preceding.

Newspapers.

253. There were 234 newspapers published in the Punjab and the North-West Frontier Province during the year 1904. Of these, 41 were published in English, 175 in Urdu, 1 in Urdú-Arabic, 1 in Hindi and Urdú, 7 in Hindi and 9 in Gurmukhi. Twelve English and 48 Vernacular papers were started; and 25 Vernacular ceased to exist during the year, leaving a total of 209 on the register. One paper was published quarterly, 89 monthly, 29 twice a month, 4 three times a month, 100 weekly, 3 twice a week, and 1 thrice a week. There were 7 daily papers.

Press Prosecutions.

254. A newspaper called the "Ahlúwália Gazette" of Amritsar was prosecuted during the year for writing a seditious article in connection with the Universities Bill. The proprietor and printer were convicted under Section 124-A of the Indian Penal Code, the former being sentenced to six months' rigorous imprisonment and a fine of Rs. 100, or in default further rigorous imprisonment for three months; and the latter, to pay a fine of Rs. 500, or in default to undergo rigorous imprisonment for six months.

56. Literary Societies.

Literary Societies.

255. The subject was reviewed in the report of 1901-02. It will not be treated again till 1911-12.

57. Arts and Sciences.

Lahore Central Museum.

256. The interest of the public continues in the Lahore Central Museum, at which the attendance during the year is the highest but one on record. The slight falling off in the numbers on *pardah-nashin* days is traceable to the fact that several of the galleries were under repair, and the winter excessively cold. Interesting and useful additions were made to the Art, Sculpture and Coin Departments; and a special feature of the Museum is to be the Industrial Art Department illustrative of the various processes in the manufacture of the industries of the Province.

CHAPTER VIII.

ARCHÆOLOGY.

[Detailed information on the subject of this chapter will be found in the following publications:—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for 1904-05; Annual Progress Report of the Archæological Survey, Punjab and United Provinces Circle, for the year ending 31st March 1905.]

58. Archæology.

Maintenance and restoration of archæological buildings.

257. In the Delhi Fort the restoration of the Sawan building was completed, and repairs were carried out to the marble work of the Ahab Hammam and to the marble chujjás of the Díwán-i-khás, several portions of which had fallen, or were in a cracked and dangerous state. Of the two new black marble elephants to be constructed at the Delhi Gate of the Fort, one was nearly completed. Some repairs were also done to the Shah Burj. The garden in front of the Díwán-i-khás was rearranged to show the building to better advantage, a large portion of the area being excavated to a depth of 15 to 18 inches to lay bare the carved marble base of the building. In the adjoining Hayát Bakhsh Garden considerable work was done in excavating and laying out the old water channels and tanks which had been buried after the Mutiny, when a large number of buildings in the Fort were dismantled and the debris spread over the whole area. Work was carried out at the tombs of Humáyún, Isa Khán and Safdar Jung, both in repairs to the buildings and in laying out and improving the grounds attached to them. The Jumaal Khána Mosque and Chousath Khambe at Nizám-ud-dín, about 5 miles from Delhi, were also repaired and restored. The restoration of the tomb of Muhammad Tuglaq Shah at Tuglaqabad was partially carried out. At Lahore the restoration of the front wall of Jahángír's tomb at Shahdara was completed, and also special repairs to the Bádsháhi Mosque. In the Lahore Fort the restoration of the Choti Khwábgah, lately used as a church, was nearly finished, and special steps were under consideration to preserve the ornamental ceiling of the Shísh Mahal. This ceiling was made in the time of the Emperor Jahángír and the roof timbers are now unfortunately beginning to rot.

Archæological Survey.

258. Last year Dr. Vögel, the Superintendent of the Archæological Survey of the Punjab and United Provinces, submitted a detailed report on the preservation of the ancient temples and monuments of Kashmir, and his proposals have now led to the creation of an archæological and research department for the State, while an order has been issued for the taking of photographs of all the buildings mentioned in his list. During the year under report the Superintendent toured for 176 days in the Kángra District and Chamba State, where the recent earthquake has done very severe damage to the historical fort in Kángra, and the picturesque temples of Mandi, Sultánpur and Bajaura. Considerable progress was made with epigraphical work in Chamba; and the Central Museum, Lahore, was enriched by many antiquarian objects discovered in Kángra—amongst them being brass statuettes and marble tablets bearing inscriptions—while gold coins of the Mughal period were added to the collection. Part II of the Surveyor's report for the year includes valuable notes on the different inscriptions, and a detailed account of the proposed repairs to and demolitions of the temples and ancient monuments in Kángra District and Chamba State necessitated by the effects of the earthquake.

CHAPTER IX.

MISCELLANEOUS.

59. Ecclesiastical Jurisdiction.

[See page 189 of the Report for the year 1901-02.]

60. Ecclesiastical.

New churches.

259. The various ecclesiastical institutions in the Punjab were noticed in the report for the year 1901-02. During the year under report proposals for the erection of 6 churches, which included churches for Miánwáli and Mashobra (Simla), were under the consideration of the Government.

61. Stationery.

General.

260. The Punjab Administration depends on the Stationery Department, Calcutta, for its requirements in this respect. The value of stationery issued to officers in the Punjab during the year aggregated Rs. 1,11,988 as against Rs. 1,29,273 in the previous year. The details are as follows:—Cost of printing paper Rs. 51,734, office stationery Rs. 57,951 and padlocks Rs. 2,303, against Rs. 32,975, Rs. 95,778 and Rs. 520 respectively last year.

62. Government Press.

Income and Expenditure.

261. The following statement compares the income and expenditure with the value of work turned out during the years 1903-04 and 1904-05 :—

Income.		Expenditure.		Value of work.	
1903-04.	1904-05.	1903-04.	1904-05.	1903-04.	1904-05.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
16,353	20,730	1,21,479	1,20,723	1,12,506	1,12,024

The income of the Press during the year under report exceeded that of the preceding year by Rs. 4,377, the figures for the two years being respectively Rs. 20,730 and Rs. 16,353. The total expenditure during the year under report amounted to Rs. 1,20,723 against Rs. 1,21,479 in the previous year, or a decrease of Rs. 756 as compared with the figures of the preceding year. The cost of work done by the Contractors for Government Printing for departments and offices during 1903-04 and 1904-05 was Rs. 49,165 and Rs. 49,030 respectively.

Punjab Government Press, Lahore—21-12-05—480.

REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1905-1906.

LAHORE:
PRINTED AT THE PUNJAB GOVERNMENT PRESS,
MCMVII.

PRINTED BY LALA SITA RAM,

SUPERINTENDENT, PUNJAB GOVERNMENT PRESS, LAHORE.

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[Number of pages fixed as the maximum limit of the Report, Part I, 20-30 pages; Part II, 150 pages.]

REPORT
ON THE
ADMINISTRATION
OF THE
PUNJAB AND ITS DEPENDENCIES
FOR
1905-06.

PART I.
GENERAL SUMMARY.

(The "year" throughout this report is not invariably the financial year ending 31st March 1906. At the heading of each chapter, with the exception of chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March 1906, in chapter II it is the revenue year ending 30th September 1905, and in chapters III and VI it is the calendar year ending 31st December 1905.

The Administration Report for 1901-02 was a decennial report, and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.)

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir Denzil Ibbetson, K.C.S.I., held charge of the office of the Lieutenant-Governor from the 28th of April 1905 to the 19th of October 1905 during the absence on leave of Sir Charles Rivaz, K.C.S.I.

HISTORICAL SUMMARY.

The Kangra earthquake.

2. On the 4th of April 1905 the hill country round about Kángra was devastated by a disastrous earthquake, which levelled to the ground nearly every building within an area of 700 square miles, and in which twenty thousand souls perished. Among the killed were 25 out of the 76 European inhabitants of Dharmsála, including nearly the whole civil staff, and 112 of the 7th Gurkhas. The one bright feature to redeem the darkness

of the tragedy was the admirable way in which the survivors turned to the task of extricating and relieving the living and paying the last offices to the dead, and at the same time of preserving order, among a panic-stricken people, in circumstances which in more advanced communities have led to the temporary paralysis of all government. No time was lost in pushing up relief parties from the plains, and in a week medical relief stations had been established at five centres; in a fortnight the treasuries were opened, and the machinery of Government was once more in motion. For the relief of distress consequent on the destruction of property generous provision was made by Government: revenue and taxation were remitted, irrigation channels repaired, and grants of timber for the rebuilding of houses and liberal advances of money were made: and at the same time private charity contributed over thirteen and a half lakhs for the relief of distress which lay beyond the province of Government to provide for.

RELATIONS WITH TRIBUTARY STATES AND FRONTIER AFFAIRS.

Political.

3. Festivities were held at Delhi, Amritsar and Lahore, in connection with the visit of Their Royal Highnesses the Prince and Princess of Wales to the province, and all the principal Chiefs who were not unavoidably absent had the honour of presentation to His Royal Highness. In PATIALA the Council of Regency continued to work with efficiency. Settlement operations are progressing well. An Act and rules for the Registration of Transport Animals have been framed on the lines of those obtaining in the Punjab, and a similar scheme has been inaugurated in JIND. His Highness the Rája of NABHA enjoyed fairly good health during the year, which was signalised by the marriage of His Highness's daughter with the Mahárájá Rána of Dholpur. In BAHAWALPUR the powers of His Highness the Nawáb have been extended by the rescission of the order requiring him to submit sentences of death for the confirmation of the Political Agent. The final settlement of the boundary disputes with the British districts of Multán and Montgomery is in train of accomplishment. Rája Bhowáni Sen was formally installed on the *gaddi* of MANDI in October 1905. The State suffered considerably from the earthquake, the death roll numbering about 1,500 souls, and the town of Mandi was reduced to ruins. Rája Balbír Singh of FARIDKOT died in February 1906, and his nephew Brij Indar Singh was installed on the *gaddi* in the following month. His Highness Rája Bhure Singh of CHAMBA was invested with the dignity of Knighthood of the Order of the Star of India: the *ex*-Rája, Rája Shám Singh, died on June 10th, 1905. Considerable damage was done by the earthquake in BASHAHR. One district of the State was throughout the year in rebellion, and a strong police force had to be despatched in the summer of 1906 to deal with the rebels. The chiefs of MADHAN, KUMHAR and BIJA died, and heirs were born to DHUDHI, DHAMI, KUTHAR and TAROCH. The Dera Gházi Khan frontier maintained a condition of complete tranquility.

ADMINISTRATION OF THE LAND.

Land revenue.

4. In spite of a poor autumn harvest in 1904, the spring crop of 1905 was so excellent a one as to bring the whole year's outturn to well above normal; and 199 lakhs or over 95 per cent. of the fixed land revenue

demand for the year were collected, besides more than 7 lakhs on account of previous years. The actual deficiencies in collection on account of the year's demand only amounted to half a lakh, the remaining balance of eight lakhs being accounted for partly by suspensions, partly by remissions due to the earthquake in Kángra, and partly by sums struck off on account of the change from fixed to fluctuating assessments. Over 4½ lakhs were suspended, but a good deal of that suspended in the autumn was collected in the spring. A regular fluctuating assessment was substituted for a fixed assessment in two tahsíls of Gujránwála which are irrigated from the Chenab Canal, causing a rise in the fluctuating revenue demand which was partly counteracted by the bad running of the inundation canals in Multán and Montgomery. The system of fluctuating assessment seems to be growing in favour in poor and insecure villages, which have indeed all to gain by its adoption.

There was a considerable increase under the head of miscellaneous land revenue, chiefly due to the unexpected success of the sale of land in the Chunián colony. The recent quinquennial assessment of grazing dues in Montgomery resulted in an enhancement, but a nominal decrease is shown this year, as the collection was kept over pending the decision of appeals against the assessment. The decrease in coercive processes for the collection of land revenue is maintained. The services of zaildárs are being used more freely than before for the collection of land revenue, with the best results, and the use of money orders for remittances of revenue continues to grow in favour.

Surveys.

5. Survey work was carried on in Multán and Muzaffargarh and riverain traverses on the Indus, Jhelum, Rávi and Sutlej. Many long standing disputes have been settled by the laying down of a permanent boundary on the Sutlej between Montgomery and the State of Baháwalpur : the local work was completed during 1904-05 and the boundary laid down has since, except in a few cases, been affirmed. The boundary on the Sutlej between Baháwalpur and Multán is still under consideration. The work of laying down fixed riverain boundaries between British districts was continued on the Chenab, Sutlej and Rávi. The Government of the United Provinces felt unable to assent to the project of a fixed boundary on the Jumna.

Settlements.

6. At the beginning of 1904-05 six settlements were in progress in the Punjab,—those of Jhang, Háfizabad, Ráwalpindi, Miánwáli, Gurgaon and Dera Ismail Khan ; and that of Karnál was started in October 1904. No settlement was completed during the year, but that of Jhang was brought near completion and has since come to an end, and that of Dera Ismail Khan ceased to exist as a separate charge by the division of the part on which orders had not been passed between the administration of the North-West Frontier Province and the Settlement Officer of Miánwáli. The supervision by the Settlement Commissioner of settlement operations in the Frontier Province is now confined to Hazára, where the settlement is expected to close shortly. The settlements of Rohtak, Hissar and Delhi were started since the close of 1904-05, but that of Ambála, for which a forecast was submitted, has been deferred for five years.

Land records.

7. Successful endeavours have been made to decrease the number of patwári candidates, who had become so numerous as to threaten to block promotion ; the educational qualifications of patwáris continue to improve, but there seems to be a decline in the proportion of both candidates and patwáris who are agriculturists by birth. Proposals have been made to increase the retiring gratuities to patwáris in the hope of attracting a better class of men and at the same time of enabling inefficient workers to be the more easily discharged. The prospects of the kánúngo service were materially improved by a substantial increase of pay all round, and the service has been well treated in the matter of promotion to higher posts. A scheme has been completed for the reorganization of the district record-room establishments. Discussion of the condition of the provincialised patwár fund is rendered unnecessary by the abolition of the patwár rate, and with it of the fund, which took place on 1st April 1906. All expenditure formerly met from the patwár fund is now charged to provincial revenues. Mutations of title continued to increase, both because of deaths from plague, and on account of special measures taken to remove the names of absentees. The work was well kept in hand, and the pending file, though slightly larger than that of last year, is no more than an average of three cases per village. The pending file of partitions is larger than it was.

Colonies.

8. There were four canal colonies in which colonization operations were being carried on during 1904-05 ; the great Lower Chenab and Lower Jhelum colonies under their respective Colonization Officers, the Chunián colony under the Deputy Commissioner of Lahore, and a collection of scattered plots in the Jhang district which were being colonised by the Settlement Officer. The colonization of the Lower Chenab colony is now drawing towards its close, and its special administration will, it is expected, be merged with the ordinary district administration in 1907. Over one and four-fifths million acres have been allotted, and an extension on the Dang Ali branch is now being distributed, while proposals are being prepared for further extensions to be known as the Burála and Kabírwála extensions, on the latter of which is to be an irrigated forest of between 70 and 80 square miles in area. The grants made to village headmen on mule-breeding conditions have proved a most successful experiment, and other grantees have been encouraged to take to mule-breeding on their own account, while a large number of mares have been branded for horse-breeding. Land on the Dang Ali extension is being allotted on camel service terms, and the strength of the camel service grantee camels has been raised to 4 corps. A good area was sown in 1904-05—in fact a far greater proportion of the area allotted than the soil can bear, and it is proposed to cut down the percentage of area that may be irrigated. The failure of the cotton crop in the succeeding year made large remissions of revenue necessary. On the Lower Jhelum canal over three hundred thousand acres had been distributed by the end of the year 1904-05; the culturable land still unallotted is not so much as was expected ; and it will not be possible to satisfy all prospective grantees on this colony. All peasant grantees on horse-breeding conditions have, however, been supplied with good land ; and these grantees are turning out a really good class of horse. A horse fair has been started at Sargodha, which promises to become one of the most important in Northern India.

Ten allotments made for regimental stud farms are being worked successfully. Colonization on the Chunián colony was nearly brought to an end, and progress was made with the distribution of the plots of the Jhang colony, which were being allotted partly in compensation for land taken by Government and partly to local landowners.

Other Government waste.

9. Of the five million acres of Government waste not under colonization, about a fiftieth was leased for temporary cultivation, the rest being only fit for grazing. The silladar camel corps have been assigned five plots of waste in Montgomery as a grazing ground. Good work has been done in counteracting the destructive effect of the hill torrents in Hoshiárpur by reafforestation.

Wards' estates.

10. Three estates held under the Court of Wards were released entirely and one partially during the year, and a total of six lakhs of debts was extinguished. It appears easier to save wards' money than to spend it, and the problem of finding satisfactory investments remains unsolved.

Land Alienation Act.

11. The fourth year of the working of the Land Alienation Act justifies the hopes entertained at its inception that it would operate to restrict wasteful and extravagant expenditure, while the steadily rising price of land gives no support to the fears once entertained that the value of land would suffer any serious and permanent depreciation. Moreover, while the cultivators have apparently had no real difficulty in obtaining money for their legitimate needs, the capital which used to be squandered unproductively is being diverted to industrial employment. The anomaly of the statutory agriculturist will probably shortly be abolished.

Descent of Jagirs Act.

12. Progress continues to be made in persuading holders of jágírs to accept the rule of primogeniture, and especially good work has been done in Karnál, where difficulties of a serious nature had to be overcome. The Sikh jágírdárs of Ambála, however, still demur to accepting the rule, more, it is said, from reluctance to take the invidious step of preferring one son before his brothers, than from any objection to the principle of primogeniture.

PROTECTION.

Legislation.

13. The only Act of the Punjab Legislature passed during the year was IV of 1905 amending the Punjab Land Preservation (*Chos*) Act. Of Indian Acts applying to the Punjab the most important are those amending the Court Fees and Stamp Acts.

Police.

14. The scarcity and high prices which prevailed during a great part of the year caused a recrudescence of crime, which after two normal years reverted to a state of affairs similar to that of 1902. The increase was most marked in offences against property, but there were but few cases of real gang robbery, and in only two districts did the operations of organised gangs cause serious unrest. Thefts of arms were more frequent than in last year, but cattle theft, as usual in years of scarcity, decreased. Serious offences against the person showed a slight increase. In the prosecution of the more important classes of offences the police have obtained a very fair measure of success. The Finger Print Bureau has continued to effect

an increase in the numbers of old offenders detected and two more Native States have adopted the system. Preventive action against persons of bad livelihood has been conducted with greater discrimination than formerly, being directed against the leaders of crime rather than its rank and file, with a reduction in the number of prosecutions but an increase in their effectiveness. The practice of referring cases to *jirgas* of tribesmen has continued to produce good results in Miánwáli and Dera Gházi Khan, and good work has been done throughout the province in enlisting the sympathy and support of local gentry in the suppression of crime. Important changes were made in the pay and organization of the police force in consequence of the recommendations of the Police Commission.

Criminal Justice.

15. In addition to the real increase of crime due to scarcity, a large increase of offences reported was due to the institution of false and frivolous charges, which in one district alone took up as much time as would represent the working hours of one Magistrate for the year. The percentage of convictions to trials fell from 27 to 25, and in the district referred to was only 10. All subordinate courts have been reminded of the necessity for the stricter use of the provisions of the Code which give the power to dismiss complaints summarily and to award compensation for frivolous accusations. The Punjab continues to show a high percentage of successful appeals.

Prisons.

16. A slight increase in the number of prisoners admitted to jail was due to under-trial prisoners; the number of convicts fell, and the average daily population was the lowest since 1896. The rules governing admission to the Delhi Reformatory have been relaxed, and it is hoped that this will result in more advantage being taken of this institution than has hitherto been the case. Good work has been done at two central jails in the mental and physical training of adolescent convicts. As regards sentences, short terms of six months and under represent more than half the total, but long-term prisoners are being received in increasing numbers. Only 14 per cent. of the prisoners admitted were recognised as having been previously convicted, and it is believed that many prisoners still escape identification. The discipline of the jails was satisfactory; and although the imposition of fetters for purposes of safe custody is much less common than formerly, only one prisoner succeeded in escaping. Offences fell by a tenth, and two-thirds of those committed were offences relating to work. The punishment most in vogue is the imposition of fetters, which accounts for two-thirds of the major punishments inflicted; the use of corporal punishment continues to decline, and it is now only employed as a last resort. The health of the jails was excellent, the death-rate being the lowest but one on record, and only just over half that of males between 20 and 60 in the province.

Civil Justice.

17. The decrease in civil litigation which has appeared during the last few years becomes this year a sharp drop of over a quarter in the number of institutions. The decrease is almost entirely confined to suits for personal property, and is undoubtedly due to the extension in 1904 of the period of limitation of suits for money lent from three to six years; whether the effect will be permanent cannot be seen until 1907, when the suits thus extended begin to mature. Another cause is the Land Alienation Act of 1900, which in

five years has reduced suits by money-lenders against agriculturists by two-fifths. There is an increase in matrimonial suits attributed to the scarcity of women caused by the disproportionately high plague mortality among them. The average value of suits continues to rise, and the number of suits for sums under Rs. 100 to decrease, but against the decrease of petty suits for personal property must be set a rise in suits of an intricate and contentious character. The average time taken over suits contested and uncontested alike has in each case decreased by one day, a result at first sight rather disappointing in view of the decrease of institutions, but explained by the fact that that decrease is confined to the simplest and shortest class of cases. Executions still are prone to lag some way after decrees, and still only a quarter of the total amount decreed is realized. Although appeals in the courts of District Judges have fallen off, the appellate work in Divisional Courts is increasing and the work both civil and criminal that these courts are called on to perform demands in the interests both of the courts and of the public an increase in the number of Civil Divisions. Orders have been issued by the Chief Court which have materially increased the effectiveness of the control exercised by District Judges over the estates of wards under the Guardians and Wards Act.

Registration.

18. The number of documents compulsorily presented for registration showed a slight decrease, but their value rose by 20 lakhs. The rise in the value of land and the increased confidence felt in this form of property appear to have stimulated sales, which increased by 14½ lakhs; mortgages on the other hand decreased, as also did gifts and leases. Optional registrations of immoveable property show a continued decline.

LOCAL SELF-GOVERNMENT.

District Boards and Municipalities.

19. The working of district boards has been entirely uneventful. A district board was created for the new district of Lyallpur. As little interest as ever was taken in the elections, but it is hoped that the distribution of the annual grant of 6½ lakhs in aid of district board finances will, by widening the field of usefulness of these bodies hitherto circumscribed by lack of funds, give a new interest to members in the performance of their duties. In municipal administration the principal feature of the year has been the adoption by all municipalities in the province of a standard code of accounts. This code, besides providing simply and sufficiently for the control of expenditure, has remodelled the system of collection of octroi, in particular by requiring refunds to be given on all exports without demanding proof of previous import. The increased supervision that can be exercised under the new code is expected generally to raise the proceeds of the tax so as to more than counterbalance the extra cost of the new system, though smaller municipalities may find it advisable to substitute for octroi some less expensive form of taxation. There are, however many small municipalities whose administration could be more economically and satisfactorily managed by the reduction of their status to that of notified areas. The local audit of municipal accounts has disclosed serious irregularities in 16 municipalities, and has also been of service in stimulating local-interest in municipal administration.

AGRICULTURE, WEATHER AND CROPS.

Operations of the Department of Agriculture.

20. The year has been marked by the organization of the Provincial Agricultural Department under a Director of Agriculture whose head-quarters have been fixed at Lyallpur, the centre of the Chenab colony. Here is to be built an agricultural college and research institute, with a staff of experts, while the existing experimental farm at Lyallpur is to be extended, and another large farm created for the Eastern Punjab, besides smaller farms for tracts whose conditions are peculiar. It is hoped that the establishment of the new department will include a trained expert for agricultural work in each district. Good work has been done with experimental cultivation in the existing farms at Sargodha and Lyallpur, especially with the classification of varieties of wheat and with the introduction of acclimatised American cotton. Progress has also been made in certain districts with the selection and distribution of seed of the best lint-producing varieties of indigenous cotton.

The Veterinary Department.

21. The Punjab Veterinary College has had transferred to it the native teaching staff and students of the Ajmer Veterinary College, and substantial improvements in accommodation have been carried out or sanctioned. There is a great demand for graduates of the college. Three veterinary hospitals were opened during the year, making 12 of these institutions, which are rapidly growing in public favour. There was very little foot and mouth disease in the province, and the year was on the whole a healthy one in spite of serious outbreaks of *surra* in two districts.

Agricultural pests.

22. Boll-worm made its appearance to a quite abnormal extent in the autumn of 1905, and almost entirely destroyed the cotton crop in the Central and South-West Punjab. The cause of this calamity was apparently the destruction by the frosts of the preceding winter of the parasite which keeps this pest in check. Measures were taken throughout the affected tracts to prevent, at any rate in part, the recurrence of the calamity by ploughing up and burning the old cotton stalks, sowing trap crops and reintroducing the parasite.

Loans to agriculturists and co-operative credit societies.

23. The Kángra earthquake necessitated large advances under the Agriculturists' Loans Act in 1904-05; the amounts advanced by Government were otherwise normal. The practice of personal distribution of loans by responsible officers is growing in favour, and is much appreciated by the people who are thereby saved a great deal of trouble and delay. There has been a considerable growth of co-operative credit societies; within 18 months from the first appointment of the Registrar of Co-operative Credit Societies 151 of these societies have been registered, a start which augurs well for the prospects of this form of self-help among the peasantry.

Prices.

24. Prices ruled high, being affected throughout the year by scarcity in other parts of India, but actual scarcity was confined to the Delhi division. Scarcity in the United Provinces kept up prices in June and July 1905, and the apparent failure of the monsoon sent them up sharply to a still higher point; and though the September rains steadied them somewhat, they remained high throughout the autumn. There was another sharp rise in February, and though they declined after the February rains, they continued to average above warning rates.

Weather and crops.

25. The monsoon of 1905 was a partial failure owing to a break from the middle of July to the middle of September. In consequence, the autumn harvest was one of the poorest on record, and in addition to the loss caused by drought, boll-worm ravaged the cotton crop, and the sowings of sugarcane were very small owing to scarcity of seed. There was a deluge of rain in September, and this, though too late to save the unirrigated autumn crops, enabled very extensive sowings to be made for the spring. The spring crop, though threatened by a period of drought early in the year, was saved by opportune rain in the middle of February, and gave the largest matured area on record, the wheat crop being particularly fine.

Arboriculture.

26. Fair progress has been made in the past three years in planting wayside trees, and an advance in this direction is now looked for from the grant of 1½ lakhs which has been set aside for this purpose. The nurseries in the horticultural gardens at Lahore have been extended to meet the large demand for fruit and other trees, which at present exceeds the supply.

FORESTS.

Management.

27. Forest offences show a tendency to increase. Numerically there is a decrease of cases of injury by fire, but there was a serious outbreak of incendiarism in Kángra where nearly 26 square miles of forest were burnt. Complaint is made of the injury done by the camels of the silladar and other camel corps in the forests thrown open to them for browsing.

Exploitation and financial results.

28. Nine and three-quarter million cubic feet of timber were removed from the forests, nearly two and a half times the amount of the preceding year. This is due to increased sales to purchasers in the Chamba, Bashahr and Multán divisions, and increased removals by right-holders and by Government agency in Kángra and Kulu on account of earthquake relief. The amount of fuel and minor produce removed was much the same as last year. The net surplus revenue was 5·1 lakhs, a decrease of 4·2 lakhs, due partly to the commencement of the new lease on more liberal terms of the Chamba State forests, and partly to the cessation of exploitation in Kulu on account of the earthquake.

MINES AND QUARRIES.

Coal and salt.

29. The output of coal increased considerably, the greater part coming, as usual, from the Dandot mine. Four other mines produced coal,—two in Jhelum and one in Attock opened in 1904 and one in Shahpur opened in 1905. The issues of salt remained steady at about 2⅔ million maunds, chiefly from the Khewrah depôt.

MANUFACTURES.

Factories.

30. The only marked feature in the history of industries for the year is the growth of factories for ginning, cleaning and pressing cotton. The arrangements for the health and safety of the operatives were generally good, and they appear in most cases to earn higher wages than those paid to ordinary labourers.

TRADE.

Trade with other provinces and States in India.

31. The effect of scarcity in Rájpútána and Central India was to check the export of wheat to Karáchi, which is the principal feature of Punjab trade, and to stimulate to a certain extent the movement of inferior food-grains to the eastward. The export of wheat fell by 11½ million maunds, and that of other grains rose by over two million. Altogether the exports from the province decreased by close on eight million maunds, but owing to the high prices obtained for foodstuffs, their value only fell by 29 lakhs. There was a rise of ten million maunds in the weight of the goods imported, and their value rose by the remarkable amount of 466½ lakhs, a fact which shows that the purchasing power of the province was not at all impaired by the partial failure of the crops. Piece-goods, both European and Indian, oil-seeds, sugar and railway materials show the greatest increase; the import of refined sugar was largely stimulated by freight concessions offered by foreign shipping companies, and the destruction of seed by the frosts of January 1904 caused a large increase in the imports of crude sugar.

Trans-frontier trade.

32. The great bulk of trans-frontier trade is with Kashmír, which shows a considerable increase, both in imports and exports. The trade with Afghánistán, encouraged by the liberal policy of the Amír, continues to increase; that with Ladákh and with Chinese Tibet has decreased. As regards Ladákh, it appears that the British trade in piece-goods is being rapidly killed by Russian competition and the extension of Russian railways, and that the war, so far from weakening Russian trade in Central India, has diverted thither a great deal of merchandise which would normally have gone to the Far East. The increase in the duty of *charas* has considerably disorganised the trade in this drug, and raw silk seems to be taking its place as a medium of exchange.

JOINT STOCK COMPANIES.

General.

33. There was an increase of nine in the number of joint stock companies; most of the new companies, it must be said, appear to combine in the same venture objects of the most miscellaneous character. Cotton mills take up one-third of the paid-up capital in the province, which amounts to 106 lakhs of rupees, and banking and insurance nearly a quarter. Nine lakhs have been invested in trading companies, which unfortunately contain many bogus and fraudulent associations. There is only one indigenous insurance company. Its financial position has been adversely criticised by the Registrar.

PUBLIC WORKS.

34. The outlay on Provincial Civil Works for the year, excluding that on repairs, was 25⅛ lakhs, of which 15⅔ were for buildings, 5 for communications and 4⅔ for miscellaneous public improvements. No new buildings of special importance were completed, but progress was made with providing new courts, offices and police stations throughout the province. Official quarters have been built for Government officers in several districts, and in Lahore a number of detached cottages have been built as quarters for clerks employed in the Secretariat. Under the head of communications the most important improvement is the extension of the driving road from Simla to Mashobra, with the widening of the old dangerous Sanjauli tunnel. Miscellaneous

public improvements include new roads and tunnels at Simla, made with the object of keeping the mall free from cooly and mule traffic, and the improvement of the mall at Lahore. A great deal of labour was thrown on the Public Works Department in repairing the damage done to buildings and roads by the earthquake in Kángra. The Indus is again endangering the town of Dera Gházi Khan and has caused serious erosion.

RAILWAYS.

Construction and traffic.

35. Several important extensions were made to the railway system of the Punjab during 1905 and the first few months of 1906. The main line was doubled between Lahore and Amritsar, and two new lines were completed, one linking Malakwál with Shorkot Road and opening up the Lower Jhelum colony, and the other from Ludhiána through Ferozepore to McLeod Ganj on the Southern Punjab Railway, which enables the trade of the Central Punjab to have a direct route to Karáchi without passing through Lahore. A line was begun and has since been partly opened from Amritsar to Patti, and work was started on another between Sángla and Shahdara. There was an increase both in the passenger and goods traffic on the North-Western Railway, but comparatively little wheat was carried, and the working of the railway as a whole was not so profitable as in the preceding year. The Kálka-Simla line was taken over by Government in 1906. Schemes for the construction of electric tramways at Lahore, Delhi and Amritsar are in different stages of maturity.

IRRIGATION.

General progress.

36. A start has been made with the construction of the important Upper Jhelum and Upper Chenab projects, and extensions are in progress on the Lower Chenab, Bari Doab and other canals A very large area—over 6,900,000 acres—was irrigated by the canals of the province, but owing to the large remissions that had to be made on account of the destruction of the cotton crop by boll-worm, the financial results were not so good as they would otherwise have been. Still in spite of this, the Lower Chenab canal paid nearly 21 per cent. on the capital invested, the Bari Doab 11 per cent. and the Western Jumna nearly 10 per cent. Taken together, productive works paid 11 per cent. on the capital invested, which by the end of the year had reached over 1,100 lakhs of rupees, and the net profit after paying interest was 79 lakhs.

REVENUE AND FINANCE.

Revenue and Expenditure of the Punjab.

37. The revenue raised in the province in 1905-06 was less by nearly 38½ lakhs than in the preceding year. The decrease is distributed through nearly all the heads of Revenue, Excise and Opium, with an increase of 3½ lakhs, being the only important exception. The most striking decreases are under Land Revenue (22⅓ lakhs), Irrigation (8⅓ lakhs), and Salt (nearly 6 lakhs). The decrease under Irrigation is due to the large remissions made on account of damage done to the cotton crop by boll-worm, and this cause and the suspensions made on account of the bad autumn harvest of 1905 probably

account for the decrease under Land Revenue. The falling-off under Salt is due to the reduction of duty which took place in March 1905. The increase under Opium and Excise Revenue is chiefly due to the rise in still-head duty on spirits, attributed to an increase of consumption of licit liquor in the chief liquor consuming districts where the experiment has been made of supplying cheap spirit. Expenditure (excluding that of the Military Railway Post and Telegraph Departments and Capital Expenditure on Canals) increased by nearly 32 lakhs. The most important increases were 9½ lakhs for Public Works, 7 lakhs for Education, and 5⅓ for Police, showing that, thanks in large measure to assistance from Imperial revenues, large provision is being made for these important needs of the country.

Local Funds and Municipal revenues.

38. The failure of the autumn harvest of 1905 caused large suspensions of land revenue to be made, resulting in a considerable decrease in the income of district boards derived from Provincial rates; there were slight increases under other heads of income, notably on account of successful sales at cattle fairs in certain districts, but altogether the income of district boards fell by a lakh and three-quarters. Under expenditure there was an increase of a lakh for education due to the opening of new primary schools towards which an assignment of three lakhs is made by the Government of India; there were also substantial increases for cattle-breeding, gardens and civil works. A decrease of nearly 2½ lakhs under the head of contributions, due chiefly to the special grants for primary education, resulted in the net increase of expenditure as shown in the accounts being only half a lakh. No district board overdrew its balance. There has been a decrease of municipal income by nearly 2¼ lakhs, chiefly under taxation. Expenditure rose by half a lakh; there was a large increase for administration due to the expenditure necessitated by the introduction of the new system of collecting octroi, and for public health and convenience caused by large drainage and other works in a few big towns. There was a decrease under public instruction due to the provincialization of the schools at the head-quarters of districts. The financial position of indebted municipalities is sound.

VITAL STATISTICS.

Births and deaths.

39. There was a rise in the birth-rate to 44·5 *per mille*, a result due, it is probable, to the immunity from autumnal sickness which the Punjab enjoyed in 1904. The chief feature in the mortality returns is plague, which alone killed nearly 16·6 *per mille* and brought the total death-rate up to 47·5, now for the fourth year the highest in India. The death-rate from fever was the same as last year; both cholera and small-pox claimed very few victims, and no other diseases deserve special mention. There were a large number of deaths from injuries due to the Kángra earthquake.

Plague.

40. The severe cold of the earlier months of 1905 with the long dry summer followed by an early winter formed conditions unfavourable to plague which showed a slight decrease from the preceding year. Nevertheless over 335,000 died in British territory and nearly 55,000 in Native States, and the disease was epidemic throughout the province except in the Himálayás and in the west and south-west. In Rohtak and Gurgaon the mortality from this cause alone was 50 and 39 respectively *per mille*, and in nine other

districts it was over 20 *per mille*. Rat destruction is chief among the measures of prevention that are being adopted, and has been carried out with success in over 3,000 towns and villages which were considered to be centres of probable infection. Disinfection by heat or by chemicals was also largely resorted to; inoculation was only popular where there was immediate danger.

Vaccination.

41. There is an increase in the number of primary vaccinations, but an unfortunate prejudice seems to exist against secondary vaccination, especially in the case of females, and this forms a serious obstacle to preventive work.

SANITATION.

General progress.

42. There is a good list given in the body of the report of sanitary improvements sanctioned or carried out. Of those sanctioned, the most important is the Ludhiána Water-Works scheme; the Amritsar Water-Works were handed over to the municipal committee during the year; and progress was made with drainage schemes in a number of towns.

MEDICAL RELIEF.

Hospitals and dispensaries.

43. There was an increase in the number of in-patients treated at the hospitals of the province, especially among women. Out-patients decreased somewhat, as the year was a healthy one apart from plague. The number of operations is the largest yet recorded. A contagious hospital for Europeans was opened at Simla, and new hospitals were opened at Amritsar and Gujránwála besides six minor dispensaries. Mention is made of the excellent work done by hospitals and dispensaries for women maintained by various Christian missions. The Pasteur Institute at Kasauli continues to do its admirable work in saving life from one of the most distressing afflictions known to humanity. Lepers are cared for at seven asylums.

EDUCATION.

General progress.

44. The year has been marked by a great advance in primary education. Special grants have enabled a large number of primary schools for girls and boys to be opened, and the number of pupils has increased proportionately. While the special zamíndári or agriculturists' schools have decreased in number, and seem likely to be superseded by the new type of village school, there is an increase in indigenous schools examined for grants, and these latter will, it is expected, be fostered by the new system by which collective have been substituted for individual standards of examination. Secondary schools for boys have increased by two, and there is a slight increase in the number of pupils. There has been an increase in the candidates who have offered themselves for the Entrance and equivalent examinations, but the percentage of passes was lower than in the preceding year. The tendency is noticed for the public to despise a purely vernacular education on account of the superior commercial value of even a smattering of English; but experience has shown that students, who have proceeded to an Anglo-Vernacular High School from a purely Vernacular Middle School, are better grounded than those who have taken up English at an earlier age. There has been a general increase in the numbers reading at the Arts Colleges. The attendance at the Law College has shown an almost unbroken decline for several years; that at the Medical College and

School fell this year, in the latter largely on account of the raising of the literary test to that of the Entrance examination. There has been a large increase of numbers at the Mayo School of Art, which has an excellent record of practical work turned out in connection with the Royal visit to India. Progress has been made in industrial and technical institutions in many parts of the province, and men are being trained as engineers, typists and shorthand writers in rapidly increasing numbers. The various training institutions are now sending out well equipped teachers, both men and women, and half the teachers in boys' schools are both trained and certificated. There has been steady progress in female education, and examination results are very satisfactory; the first batch of fully qualified teachers that has passed out of the Normal School for Women marks an important advance from which much is hoped. Large sums have been spent on European education; but the development of boys' schools is much retarded by the difficulty of obtaining suitable teachers, a problem which in the case of girls' schools is being solved by the training classes at St. Bede's College, Simla. The total expenditure on education was 49½ lakhs, an increase of over 8½ lakhs; provincial revenues contributed 20 lakhs of this, 6 lakhs more than in the previous year. Many of the recommendations of the Educational Conference held during the year have already been carried out, notably the opening of commercial classes in certain High Schools, changes in the scheme of studies, and the revision of the standards of examination in indigenous schools.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1. Physical Features of the Country, Area and Climate.

(See pages 1—12 of the report for the year 1901-02.)

2. Historical Summary.

(A sketch of the history of the Punjab up to the close of 1901-02 is given in the report for that year. It is not contemplated as a rule that this section should be written up except in the decennial report, but it is impossible to pass over without record an event of the importance of the Kángra earthquake.)

The Kangra earthquake.

1. On the 4th of April 1905 at the hour of six in the morning the district of Kángra and the neighbourhood was visited by an earthquake which in the extent of its ravages and the destruction wrought of life and property is without equal in the history of British India. The shock was felt most severely in that portion of the Kángra valley which lies between the Beás river on the south and the Dhaoli Dhár mountain range on the north, and between the fort of Rihlu on the west and the village of Baij Náth on the east. Within this area, roughly 700 square miles in extent and containing a population of about a quarter of a million, were included the civil station and cantonment of Dharmsála, the town, tahsíl and fort of Kángra, the small station of Pálampur, a tahsíl head-quarters and the centre of the tea industry, the town of Jowála Mukhi with its famous shrine, the important villages of Nagrota and Bhawárna, besides a large number of small hamlets. A preliminary tremor lasting a few seconds was all the warning that was received of the impending calamity. Then came a violent shock from north to south, and an equally violent return in the opposite direction, and in an instant almost every building in Dharmsála, Kángra and Pálampur was a flattened heap of ruins, and of the villages in the area visited by the full severity of the shock all to a greater or less degree met the same fate. At the early hour of the morning most of the people were still in their houses; some felt the preliminary tremors and escaped: of the rest many were killed outright by the falling masonry, and the others, some injured, some whole, had to wait till help came to extricate them. All supplies of food, clothes and medical appliances were alike buried beneath the fallen houses, and to the horrors of the disaster was added immediate want for the necessaries of life.

Loss of life and property.

2. In Dharmsála every building with four exceptions was levelled to the ground. Out of 76 Europeans present in the station, no less than 25 lives were lost, including Mr. Loxton, the District Judge, Messrs. Levi and Young, Assistant Commissioners, and Mr. Farley, Executive Engineer. The 7th Gurkhas lost 112 in officers and men. Seven Europeans were killed in Kángra and 4 in Pálampur tahsíl, and altogether the death roll in this tract was not under 15,000 souls. Eastward of the tract where the full force of the shock was felt, great damage was inflicted in the Kulu and Saráj tahsíls, Láhúl and Spiti, Mandi and Suket. The only large towns in this area are Mandi and Sultánpur, in each of which about 200 lives were lost. Outside the towns about 750 were killed in Mandi and rather more in the Kulu sub-division. The loss of cattle was very great. Altogether the earthquake caused loss of life estimated at not less than 20,000 souls in 409 villages; about 100,000 houses were levelled to the ground and over 13,000 plough cattle and nearly 40,000 other animals destroyed. Every tea garden in the district, the slate company and the fruit gardens of Kulu suffered severe losses of buildings, plant and machinery, and one result of the disaster has been that most of the tea gardens have passed into native hands, and that the little European community of Pálampur has been dispersed.

Measures for relief.

3. At the head-quarters of the district the survivors were confronted with a situation of the most distressing nature and one requiring all their energy and fortitude. Of those whose lives had been spared, some were buried beneath piles of masonry, many were in need of medical assistance, all wanted food and clothes; and the whole of Kángra beyond Núrpur as well as Mandi was cut off from telegraphic communication; of the four civil officers, three were killed outright and the fourth was in camp. Messengers were sent to Núrpur and Pathánkot with telegrams, which were delivered in Lahore early next day: a special train left Lahore that day, and on the 6th the first instalment of assistance including several medical officers reached Dharmsála. Meanwhile on the 4th and 5th the survivors of the European officers and the troops and police were working gallantly at the task of extricating the living and afterwards of removing and burying the bodies of the dead, in which work the Gurkhas did service beyond all praise. From the 7th help began to pour in daily; two companies of Pioneers reached Dharmsála on the 9th, and on the 12th the Sappers and Miners began work on the road between Shahpur and Pálampur. On the 13th two more companies of Pioneers started work at Kángra. At the same time supplies of food and tents were being pushed up from all directions. By the 9th temporary shops had been opened in many places, and by the 16th the grain stores of Kángra town had been opened. Much assistance was also given by native gentlemen who dispensed food and clothes freely and organised private relief parties. As has been said, medical assistance reached Dharmsála on the 7th; on that day officers were despatched to Kángra and Pálampur, and on the 10th medical relief centres had been established at five places, and welcome assistance was given by a Mission Medical Staff and by the Arya Samáj. By the 19th 16 hospitals were in full work. The treasuries were open at Pálampur on the 15th and at Dharmsála on the 18th. Thus in a district unserved by the railway with communication by road and telegraph interrupted and in the face of an appalling calamity sweeping away almost all its responsible officers, not only was order preserved from the first, but provision for relief of distress was established in under a week and the machinery of Government was working in a fortnight.

It would take too much space to detail the subsequent history of the measures taken to mitigate the effects of the disaster. One serious result of the earthquake was that the irrigation channels throughout the Pálampur and Kángra tahsíls had been destroyed, and many of these were reconstructed at the cost of Government by the troops. Land revenue to the extent of over a lakh-and-a-half was remitted, and no income tax was levied in the towns and villages severely affected. Liberal advances were given for the purchase of cattle to replace those destroyed by the earthquake, and arrangements were made for the supply of timber to the people free of payment or at favourable rates. The total Government expenditure caused by the earthquake was 15½ lakhs, of which 11½ were on account of temporary buildings and repairs or the restoration and rebuilding of Government property. Nor was public charity behind hand. A meeting of the citizens of Lahore was summoned on April 24th to inaugurate measures for the relief of the sufferers, and a subscription list was immediately opened which realised the magnificent sum of over thirteen-and-a-half lakhs. The three principles on which relief was distributed were (1) that the object of the fund was not to compensate for loss, but to relieve distress; (2) that in relieving distress no distinction should be made of race, creed or class; and (3) that the first claim on the fund was the immediate and temporary relief of actual want; the second, assistance in giving a fresh start in life, so far as funds might permit, to those who had lost their means of subsistence. Officers were lent by the Punjab Government to supervise the work of distribution which was completed by the end of the year. The losses of the military were specially relieved by a separate fund inaugurated by Lord Kitchener, and private relief parties organized by various Indian gentlemen performed the most valuable services.

3. Form of Administration.

(See pages 32—35 of the report for the year 1901-02.)

4. Character of Land Tenures and System of Survey and Settlements.

(See pages 35—43 of the report for the year 1901-02 and the Punjab Settlement Manual.)

5. Civil Divisions of British Territory.

(See page 44 of the report for the year 1901-02.)

6. Details of the last Census—Tribes and Language.

(See pages 45—53 of the report for the year 1901-02.)

7. Changes in the Administration.

Personnel.

4. Sir Denzil Ibbetson, K.C.S.I., held charge of the office of Lieutenant-Governor from the 28th of April 1905 to the 19th of October 1905 during the absence on leave of Sir Charles Rivaz, K.C.S.I. The death has to be recorded of the Hon'ble Mr. Alexander Anderson, C.I.E., officiating Firancial Commissioner, who died on the 19th April 1905.

Area, population and revenue of the Punjab.

5. The area of the Province according to the last returns is 96,704 square miles, its population (census of 1901) 20,306,252, and the land revenue collections 241½ lakhs of rupees.

8. Relation with Tributary States and Frontier Affairs.

Supervision.

6. The arrangements for the purposes of supervision of the Native States remain as they were at the time of the last report, the States being grouped as follows:—I. Patiála, Baháwalpur, Jínd and Nábha in the political charge of the Political Agent for the Phulkián States and Baháwalpur, who has his head-quarters at Patiála; II. Kapurthala, Mandi, Máler Kotla, Faridkot and Suket in the political charge of the Commissioner of Jullundur; III. Sirmur, Kalsia, Pataudi, Lohâru and Dujána in the political charge of the Commissioner of Delhi; IV. Biláspur, Bashahr and other States in the Simla Hills in the political charge of the Superintendent of Hill States, who is also Deputy Commissioner of Simla; and V. Chamba in the political charge of the Commissioner of Lahore; to which may be added VI the frontier tribes of the Dera Ghâzi Khan district under the political charge of the Deputy Commissioner of Dera Ghâzi Khan. Full information will be found in the report for 1901-02 as to the statistics of each State.

PATIALA.

Area, 5,412 square miles; population, 1,596,692; gross revenue, Rs. 65,57,930; army and police, 5,522; race of Chief, Sidhu Jat; age of Chief, 14.

General progress.

7. The constitution of the Council of Regency remained unchanged. The Council continued to work with energy and efficiency. There was a poor autumn harvest, but, owing to the ample supply of water in the canals and copious winter rains, the crops on the whole were up to a good average. The increase in the water-rate has caused a substantial increase of revenue. Settlement operations continue to make satisfactory progress. Measurements have been completed except in the hill tracts, and assessments have been announced in five tahsíls. The finances of the State are in a flourishing condition, and the cash balance in hand at the close of the year was over nine lakhs. The Public Works Department has spent some 15 lakhs, 10 of which were on original works. There has been an increase of nearly 60,000 acres in the area irrigated and of over 4 lakhs in the canal revenue. There was slightly less plague than in the previous year, and much has been done in the way of prevention by the destruction of rats. The policing of the Rájpura-Bhatinda section of the railway was transferred from the State to the Punjab Railway Police on 1st April 1906. An Act and rules for the registration of transport have been framed by the Darbár, closely following the lines of those in the Punjab.

Personal.

8. His Highness Mahárája Bhupindra Singh enjoyed fairly good health during the year, and is reported to have made satisfactory progress with his studies at the Aitchison College. Mr. A. C. Sells has been his guardian throughout the year. It is to be regretted that Kanwar Sir Ranbír Singh, K.C.S.I., has been in indifferent health during the year, but it is hoped that his visit to Europe in company with Major James will result in complete convalescence. Both the Mahárája and the Kanwar Sáhib were present at Lahore and Amritsar on the occasion of the visit of His Royal Highness the Prince of Wales.

NABHA.

Area, 928 square miles; population, 297,949; gross revenue, Rs. 14,71,539; army and police, 1,562; race of Chief, Sidhu Jat; age of Chief, 62.

Personal.

9. His Highness Rája Sir Híra Singh, G.C.S.I., G.C.I.E., has been in fairly good health throughout the year. He was present at the visits paid by His Royal Highness the Prince of Wales to Lahore and Amritsar. The marriage of His Highness' daughter with the Mahárájá Rána of Dholpur took place at Nábha on the 8th July.

General.

10. The agricultural year has on the whole been a fair one, and there has been less plague than usual. The building of *mandís* or markets has been carried on with vigour, and it is proposed to introduce electric power for working cotton factories.

JIND.

Area, 1,259 square miles; population, 282,051; gross revenue, Rs. 12,49,000; army and police, 1,868; race of Chief, Sidhu Jat; age of Chief, 27.

General.

11. His Highness Rája Ranbír Singh was present at Lahore and Amritsar during the visits of His Royal Highness the Prince of Wales. There was some plague in the State, though less than last year, and the town of Jínd continued free from it. The Charkhi Dádri tract was threatened with famine, and Rs. 50,000 were sanctioned for relief works, but timely rain prevented any real distress. Under recent orders of Government the supply of water which will be passed into the Jínd distributaries of the Western Jumna Canal has been raised to an amount calculated to irrigate some 60,000 acres, about 10,000 more than before. A scheme for the registration of transport is now in force.

BAHAWALPUR.

Area, 15,000 square miles; population, 720,877; gross revenue, Rs. 26,00,000; army and police, 1,093; race of Chief, Daudputra; age of Chief, 22.

General.

12. His Highness the Nawáb Muhammad Bahawal Khán V was prevented by a sharp attack of fever from taking part in most of the ceremonies on the occasion of the visit of His Royal Highness the Prince of Wales to Lahore. The orders requiring him to submit sentences of death for the confirmation of the Political Agent have now been rescinded. Orders have been passed by Government on the question of the settlement of the riverain boundary with Multán and Montgomery, and the disputes are now all settled with the exception of a few cases remanded for further inquiry. Sanction has been given to the building of a large general hospital in Bahawalpur, and to an addition to the female hospital, and also of a new college building. The agricultural year has been prosperous, and there has been no plague in the State.

KAPURTHALA.

Area, 630 square miles; population, 314,351; gross revenue, Rs. 20,00,000; army and police, 1,106: race of Chief, Ahlúwália Sikh; age of Chief, 33.

General.

13. His Highness the Rája returned from his visit to Europe in the beginning of November 1905, and was present at Lahore on the occasion of the visit of His Royal Highness the Prince of Wales. The Lieutenant-Governor paid a short visit to Kapúrthala in March 1906. Sardár Guláb Singh, Chief Secretary, died on April 2nd, 1905, and was succeeded by Díwán Bhagwán Dás. Plague prevailed more or less throughout the State.

MANDI.

Area, 12,000 square miles; population, 174,045; gross revenue, Rs. 4,30,000; army and police, 172; race of Chief, Rájpút; age of Chief, 22; tribute, Rs. 1,00,000.

14. Rája Bhowáni Sen was formally invested by the Commissioner of Jullundur with the powers of a Ruling Chief at a Darbár held in Mandi on October 7th, 1905. The Rája came to Lahore for the visit of His Royal Highness the Prince of Wales. At the time of the earthquake of April 4th, 1905, the Rája and Mr. Millar, the Superintendent, were in the dák bungalow at Pálampur in the Kángra district and were buried in the ruins; both had a narrow escape and were extricated with difficulty. The loss of life in the State due to the earthquake was about 1,500 souls, and from the north-west border of the State to the town of Mandi—a distance of about 27 miles—nearly all houses were levelled, and the town of Mandi itself was reduced to ruins. Liberal relief was given by the Darbár, the poor being fed from the State granaries, while loans for the purchase of cattle and re-building of houses were freely granted. The estimated damage to State buildings was 5 lakhs and to roads and rest-houses about half a lakh. In consideration of these losses the Government of India remitted Rs. 1,20,000 of the nazarana payable on the succession of Rája Bhowáni Sen, and suspended the payment of the balance of one lakh till 1909. General.

SIRMUR.

Area, 1,198 square miles; population, 135,687; gross revenue, Rs. 6,00,000; army and police, 458; race of Chief, Rájpút; age of Chief, 39.

15. His Highness the Rája came to Delhi on the occasion of the visit of His Royal Highness the Prince of Wales. General.

MALER KOTLA.

Area, 167 square miles; population, 77,506; gross revenue, Rs. 5,47,127; army and police, 356; race of Chief, Sherwáni Afghán; age of Chief, 48.

16. The State continues to be administered by the Regent Sáhibzáda Ahmad Ali Khán who attended the functions at Lahore on the occasion of the visit of His Royal Highness the Prince of Wales as representative of the Nawáb. The Regent's younger brother Sáhibzáda Jafar Ali Khán was married on the 14th July 1905 to the daughter of Háji Muhammad Khán, Raís of Budhán in the Aligarh district. The crops of both harvests were good, and plague, though severe, was less than last year. General.

FARIDKOT.

Area, 642 square miles; population, 124,912, gross revenue, Rs. 3,56,250; army and police, 325; race of Chief, Barar Jat; age of Chief, 10.

17. Rája Balbír Singh died on February 4th, 1906, and the succession of his nephew and adopted heir Brij Indar Singh having been sanctioned by the Government of India, he was formally installed by the Commissioner of Jullundur at a Darbár held at Farídkot on March 15th, 1906. The young Rája being a minor, the administration of the State is carried on by means of a council of three. General.

CHAMBA.

Area, 3,216 square miles; population, 127,834; gross revenue, Rs. 7,39,196; army and police, 419; race of Chief, Rájpút; age of Chief, 37; tribute, Rs. 5,000.

18. His Highness Rája Bhure Singh was in January 1906 invested with the dignity of Knighthood of the Order of the Star of India. He was present at Lahore for His Royal Highness the Prince of Wales' visit. His brother, Rája General.

Shám Singh, *ex*-Rája of Chamba, died on June 10th, 1905. The year was on the whole a favourable one: the revenue was realised without difficulty, and remissions were only necessary in the Barmor Wazarat, where the earthquake was most felt.

SUKET.

Area, 420 square miles; population, 54,676; gross revenue, Rs. 1,27,971; army and police, 94; race of Chief, Chandarbansi Rájpút; age of Chief, 41.

General. 19. The Rája went to Lahore for the visit of the Prince of Wales. Considerable damage was done by the earthquake, but many of the State buildings as well as those in towns and villages have now been rebuilt. The telegraph has been extended from Mandi to Suket.

KALSIA.

Area, 168 square miles; population, 67,181; gross revenue, Rs. 1,70,079; army and police, 119; race of Chief, Jat; age of Chief, 23.

General. 20. Full powers were conferred during 1905-06 on Sardár Ranjít Singh, who was present at Delhi during the visit of His Royal Highness the Prince of Wales. The State remained practically free from plague.

PATAUDI.

Area, 52 square miles; population, 21,933; gross revenue, Rs. 85,577; army and police, 42; race of Chief, Afghán; age of Chief, 46.

General. 21. Munshi Sáhibdád Khán, Extra Assistant Commissioner, was appointed Názim in place of Khán Bahádur Qásim Ali Khán, who died in December 1905. The Nawáb came to Delhi for the visit of His Royal Highness the Prince of Wales.

LOHARU.

Area, 222 square miles; population, 15,229; gross revenue, Rs. 66,000; army and police, 43; race of Chief, Mughal; age of Chief, 46.

General. 22. The Nawáb was prevented by illness from coming to Delhi for His Royal Highness the Prince of Wales' visit.

DUJANA.

Area, 100 square miles; population, 24,174; gross revenue, Rs. 77,170; army and police, 178; race of Chief, Afghán; age of Chief, 41.

General. 23. The Nawáb was present at Delhi for the visit of His Royal Highness the Prince of Wales.

BILASPUR.

Area, 448 square miles; population, 90,873; gross revenue, Rs. 1,90,000; army and police, 97; race of Chief, Hindu Rájpút; age of Chief, 32; tribute, Rs. 8,000.

General. 24. The Rája has continued to reside at Benáres, and the affairs of the State have been satisfactorily administered by Mían Amar Singh. The settlement is making good progress.

BASHAHR.

Area, 3,820 square miles; population, 80,572; gross revenue, Rs. 95,000; army and police, 13; race of Chief, Hindu Rájpút; age of Chief, 68.

General. 25. The mental faculties of the Rája are failing, and the State has continued to be administered by Rái Sáhib Mangat Rám. Considerable damage was done by the earthquake, and some 25 persons were killed as well as a large

number of sheep and cattle. The district of Dodra Kawar was throughout 1905-06 in a state of rebellion. The ringleader, Ran Bahádur Singh, was induced to surrender himself in Simla, where he died. In the summer of 1906 it became necessary to despatch a strong force of police under the Assistant Commissioner and Superintendent of Police to deal with the rebels.

Other Simla Hill States.

General.

26. The crops throughout the Hill States have been generally good. There was a sporadic outbreak of cholera in JUBBAL and KUMHARSAIN in October 1905, and about 22 persons died: plague appeared in NALAGARH in the same month, killing 46. The Sandoch pargana of KHANETI was in revolt against the Manager. Thákur Bishen Chand of MADHAN died on the 30th December 1905, and was succeeded by his son, Randhir Chand, aged 18. Orders have been passed directing the Superintendent of Hill States to take over the management of the State forest of GHUND to prevent their further injury. The State of BAGHAL has been administered by a council of two, and progress made with the settlement. The revision of the land-revenue settlement of JUBBAL is nearly complete, and a record-of-rights for the forests will shortly be undertaken. A son and heir was born to the Thákur of DHADHI on 19th August 1905, to the Rána of DHAMI on 24th October 1905, to the Rána of KUTHAR on 25th August 1905 and to the Thákur of TAROCH on 29th October 1905. Rána Tej Singh of KUNIHAR died on 7th October 1905, leaving a son Tika Hardeo Singh, aged 7, and Thákur Udái Chand of BIJA died on the 19th June 1905, leaving a son Puran Chand, aged 10. Munshi Sukh Chain Singh was appointed Manager of KUMHARSAIN.

Frontier Affairs.

The Dera Ghazi Khan border.

27. There has been absolute peace on the Dera Gházi Khan border during the year. There is a considerable increase in the number of civil cases instituted before the jirgas, which may be regarded as a sign of increased confidence in the administration. The working of the Border Military Police has been satisfactory. The failure of rains before March 1906 caused considerable scarcity of fodder and grain among the hill people, but timely rain in March improved the situation substantially.

9. Condition of the People.

General condition.

28. The period dealt with by this report in one section or another covers two complete years, from the sowing of the autumn crop of 1904 to the spring harvest of 1906. The autumn harvest of 1904 was a very poor one, and large tracts remained unsown, while the proportion of crops to cultivation was low. As the poorer classes everywhere depend on the autumn grains until the spring harvest is cut, and in the greater portion of the province make them their staple diet the whole year round, we shall find in chapter III these conditions seriously affecting the returns of crime in the calendar year 1905. The spring crop of 1905 in January and February suffered from severe frosts, and at the time seemed to have received more damage than they really had—a fact which tended to intensify the conditions of scarcity. As, however, it turned out, the crop was a very fair one and made the year's crops on the whole to be above the average, and in chapter II it will be seen that the land revenue was well paid in, while in chapter III the good spring crop is used to explain the reduction in mortgages. But it is to be borne in mind that a good wheat harvest affects chiefly the landowning classes and their menials, and not the industrial and masterless population who depend on cheap grains of the coarser sorts. Hence we do not in chapter III find that the conditions which led to an increase of crime in 1905 at all alleviated. In fact the conditions of the monsoon were such as to intensify them, as they were very unsatisfactory for the autumn harvest, and until the middle of September it seemed that there would be no unirrigated sowings for the spring. The result was wild speculation in grain and a very sharp rise of prices almost everywhere. The cotton crop too

was almost a total loss from boll-worm. The trade of 1905-06 which was based on the two crops of 1905 showed a marked decrease of exports, especially of wheat, more due, as will be seen in section 33, to the holding up of stocks in view of the scarcity in Central India and Rájpútána than to the actual shortage of supply, while this scarcity attracted the coarser food-grains in that direction, thus helping to raise their price to the detriment of the poorer classes in the Punjab. That the purchasing power of the well-to-do was not impaired appears from the large increase in imports. Prices, however, ruled high through the winter and there was scarcity in the Delhi division necessitating the opening of relief works in Rohtak. Finally, the spring harvest of 1906 was a bumper both in area and yield, but its effects on the condition of the people come in a period which will be dealt with in the next issue of this report. The health of the people in 1905 was, as will be shown in chapter VI, good, were it not for the ravages of plague which continues to raise the death-rate of the province to an alarming height.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications :—

Report on the land revenue administration of the Punjab for the agricultural year ending 30th September 1905.

General report on the operations of the Survey of India for the year ending 30th September 1905.

Annual report on the Settlement Operations in the Punjab for the year ending 30th September 1905.

Report of the Operations of the Department of the Land Records and Agriculture, Punjab, for the year ending 30th September 1905.

Annual report of the working of the Punjab Alienation of Land Act, XIII of 1900, for the year ending 30th September 1905.

Annual reports for the Chenab, Jhang, Jhelum and Chunián colonies for the year ending 30th September 1905.

Report on the administration of estates under the Court of Wards in the Punjab for the year ending 30th September 1905.]

10. Realization of the land revenue.

General conditions in 1904-05.

29. The autumn harvest of 1904 was a poor one ; large areas remained uncultivated, while a fifth of the crop sown failed to mature. On the other hand, the spring harvest in 1905 was generally an excellent one, in spite of unusually severe frosts in January which seriously injured the earlier sown crops ; and this more than made up the deficiency in the autumn crop and placed the whole year's outturn at 5 per cent. above normal. On the other hand, the disastrous earthquake in Kángra made the remission of over a lakh of rupees in that district necessary.

Fixed land revenue.

30. The fixed land revenue demand stood at 207½ lakhs, of which 199 lakhs or 95·4 per cent. were collected. Of the remaining 8½ lakhs, only the small amount of half a lakh represents actual deficiencies in collection, as Rs. 3,70,000 remained under suspension, Rs. 1,04,000 shown as irrecoverable were subsequently remitted on account of the Kángra disaster, Rs. 2 37,000 (also shown as irrecoverable) were struck off on account of the change from the fixed to the fluctuating system of assessment in two tahsíls of Gujránwála, and the rest represents various items of undetermined or irrecoverable balances. Rs. 7,16,000 were collected on account of previous years, and this coupled with the writing-off of considerable irrecoverable arrears has reduced the balance on account of previous years to under 12½ lakhs.

Suspensions and remissions of fixed land revenue.

31. Rs. 4,53,000 were suspended, chiefly in Hissar, Rohtak, Gurgaon, Lahore, Gujrát and Shahpur. The Hissar suspensions were due to a poor autumn crop in Sirsa; those in Rohtak and Gurgaon to damage done to the spring crop by frost. The Lahore suspensions belong chiefly to the unirrigated tracts in Sharakpur, where there was a partial failure of rain for both harvests. An early cessation of autumn rains followed by prolonged frosts made the suspensions in Shahpur necessary. It was found possible to collect with the spring harvest a good amount of that suspended in the autumn, in Gujrát more than half, so that the recoverable balance of fixed land revenue under suspension for the year stood, as already mentioned, at only Rs. 3,70,000. Including amounts suspended in past years, the collections of suspended revenue amounted to Rs. 7,31,000. In addition to the remissions in Kángra above referred to, Rs. 3,35,000 under suspension were remitted during the year, mostly in Miánwáli, and the balance of suspended fixed land revenue was reduced from 21 lakhs to less than 15 lakhs. A Bill was prepared during the year for the amendment of the Tenancy Act in order to give increased powers to secure the remission or suspension of cash rents by landowners who have benefited by remissions or suspensions of land revenue.

Fluctuating land revenue.

32. The movement towards the substitution of fluctuating for fixed assessments, which has been a marked feature of the revenue administration of the Punjab during the last few years, has been maintained in the year under report, with the introduction of a regular fluctuating assessment in two tahsíls of the Gujránwála district which are irrigated from the Chenab Canal. Partly from this cause, the amount of fluctuating land revenue permently excluded from the rent roll has risen from 36½ lakhs to over 40 lakhs; but this result is affected by the inclusion of arrears of consolidated rate on the Jhelum colony which had been kept in deposit for two years pending orders. On the other hand, the increase would have been much larger but for the bad running of the inundation canals and other unfavourable conditions in Multán and Montgomery where a decrease of 3 lakhs is shown. These two districts are chiefly responsible for the decrease of a lakh in the collections on account of fluctuating assessment of canal-irrigated lands. The popularity of the system of fluctuating assessment appears to depend on whether the people think it likely to be pecuniarily advantageous to them; it seems to be growing in popularity in those insecure tracts where its adoption is peculiarly appropriate, and especially among the poorer villages.

Miscellaneous land revenue.

33. The total collections of miscellaneous land revenue rose from 12·1 lakhs to nearly 13½ lakhs, chiefly on account of the unexpected success of the auction sale of land in the Chunián colony. Tirni* receipts show a decrease of Rs. 23,000, chiefly in the Jhang district, where it is said to be due to alterations in the method of assessment. The recent quinquennial assessment of tirni in Montgomery has resulted in an enhancement, but as distribution lists were not prepared pending the decision of appeals, a nominal decrease is shown this year. There are large balances of miscellaneous revenue in Shahpur due to the non-payment of nazaránaf.

Collection of the land revenue.

34. The decrease noted in last year's report in the total number of coercive processes for the collection of land revenue was maintained in 1904-05: warrants in particular decreased by one-third. The practice is gaining ground in many districts for utilising in the collection of revenue the services of zaildárs‡, whose local influence renders them peculiarly fitted for this duty, and this practice explains the small proportion of writs to warrants in certain districts, where the zaildári agency is used practically as a more effective substitute for writs. The use of money orders for remitting revenue demands continues to grow in favour.

11. Survey.

Survey of India Party No. 18 (Punjab).

35. A 2-inch supplementary survey was carried out in Multán and Muzaffargarh, and about 1,500 square miles were surveyed. About 2,400 squares were traversed in Multán and Muzaffargarh. A riverain traverse was carried out on the Indus, Jhelum, Ravi and Sutlej in 14 districts and in the Baháwalpur State, and about 3,000 square miles of traverse were completed.

Boundary demarcation.

36. Local work on the permanent boundary between the Montgomery district and the Baháwalpur State was completed during the year, and orders have been passed approving, except in a few cases, the boundary laid down. That between Multán aud Baháwalpur is still under consideration. Fixed boundaries were laid down between British districts on the Chenab, Sutlej and Ravi. The Government of the United Provinces felt unable to assent to the substitution of a fixed for a fluctuating boundary on the Jumna.

12. Settlements.

Settlements in progress.

37. Six settlements were in progress at the beginning of 1904-05. No settlement was completed in this year; one, that of Karnál, was started in October 1904.

Jhang.—The remaining three assessment reports were written during 1904-05, and the settlement was completed in May 1906. In the Chenab riverain circles fixed assessments are being largely replaced by fluctuating, but in the Jhelum and Joint river circles fixed assessments are being retained. The tract irrigated by the Lower Chenab and Lower Jhelum Canals has been put under a purely fluctuating assessment.

* Tirni—dues for grazing in Government waste.
† Nazarana—rent due to Government as landlord of Crown lands.
‡ Zaildars—local gentry who receive retaining fees for general assistance to Government.

Hafizábad.—Final orders were passed on the canal-irrigated tract, and the new demand introduced from the autumn harvest of 1904. The new assessment is almost entirely fluctuating and showed, in the first year, an increase of over a lakh. The assessment work in the other circles has since been completed by the issue of orders on the assessment proposals for the Chenab circle and non-canal villages in the Bar circle. The process of *kilabandi*, or the redistribution of the fields into regular rectangles, is being carried out on a large scale in this settlement.

Ráwalpindi.—Survey work was completed in 1904-05, and the work of final attestation of the record-of-rights was being pressed on. The assessment report for the Gujar Khan tahsíl was submitted, and an increase of Rs. 34,000 or 15 per cent. will be taken. In 1905-06 proposals for the re-assessment of the other tahsíls included in the settlement were submitted to the Financial Commissioner, and the orders of Government on the assessment of the Ráwalpindi tahsíl have been received. The increase taken in this tahsíl will amount to 25 per cent.

Miánwáli.—Survey work was carried on during 1904-05 and was completed in the summer of 1906. The tahsíls of Bhakkar and Leiah have been added to the charge of the Settlement Officer, thus placing the whole of the district of Miánwáli as at present constituted under his care.

Gurgaon.—Progress was made with the correction of existing maps, and much was done in the way of improving the quality of the subordinate staff.

Karnál.—Remeasurement and correction of existing maps were carried on. An endeavour was made to introduce *kilabandi* into the canal tract, but in view of the great difficulties experienced in carrying it out, the attempt was abandoned. Endeavour is, however, being made in mapping villages in the canal-irrigated tract to make as far as possible the survey numbers of regular shape and moderate dimensions.

Dera Ismail Khan.—The last assessment report of the old Dera Ismail Khan district was submitted by the late Captain Crosthwaite. It included 19 estates now in the Dera Gházi Khan district of the Punjab on which orders were passed by the Punjab Government. The tahsíls of Bhakkar and Leiah (now included in the Miánwáli district of the Punjab), whose assessment had long been finished, were transferred for final completion to the Settlement Officer of Miánwáli, and the completion of the settlement of the portion of the charge now included in the North-West Frontier Province will be carried out by the administration of that province.

38. The supervision by the Settlement Commissioner of operations in the North-West Frontier Province is now confined to the Hazára district, the settlement of which is expected to close shortly. **Supervision in the North-West Frontier Province.**

39. Forecast reports were submitted during 1904-05 for the settlement of Rohtak and Ambála. The re-assessment of Rohtak was sanctioned and began in October 1905, but that of Ambála was deferred for five years. Forecast reports for the districts of Hissar, Delhi and Gurdáspur have since been submitted, and the settlements of the two former were started in October 1906. Reports were submitted to Government on the revision of occupiers' rates on the Bári Doáb and Western Jumna Canals. **Coming settlements and miscellaneous business.**

13. Land records.

40. A full account of the patwári and kánúngo agency was given at pages 71—75 of the report for 1901-02. There has been a satisfactory decrease in the number of admitted candidates, who have been in past years so numerous as to block promotion, and the percentage of candidates to appointments is now 38. The educational qualifications of patwárís show a continued improvement, 36 per cent. having passed the Middle or higher examinations. Among the candidates the proportion is not quite so good as in last year, but stands at the respectable figure of 69. Proposals were submitted to increase retiring gratuities, and it is hoped that if they are accepted, it will then be possible to insist more strictly on **Patwari and kanungo agency and land record establishments.**

the Middle standard as a necessary qualification, while it will at the same time be easier to discharge non-efficient men. The number of agriculturist candidates decreased more than proportionately to the total decrease, and there is a decline in the number of agriculturist patwáris, though the total number of patwáris has increased. A satisfactory proportion of kánúngo vacancies were filled by patwáris, but the proportion of patwáris accepted as kánúngo candidates was below that prescribed. The pay of the kánúngo service was materially improved from 31st March 1905. District kánúngos now receive salaries rising by increments of Rs. 4 from Rs. 60 to Rs. 80; tahsíl office kánúngos receive Rs. 40; and field allowances have been made available for all field kánúngos instead of as formerly for half only. The kánúngo service has shown satisfactory ability and experience, and there are only two kánúngos who do not possess a certificate of efficiency. Satisfactory promotion to higher posts such as those of Tahsíldár and Náib Tahsíldár has been given to kánúngos. A scheme for the reorganisation of the establishment of district record-rooms was completed during the year, and the question of the amalgamation of the copying agency and department is under consideration.

The patwar fund.

41. The financial position of the provincialised patwár fund in 1904-05 was much more favourable than was originally anticipated, owing largely to the inclusion in it of the Chenab colony fund. A new system of accounts was introduced with effect from 1st April 1905. The abolition of the patwár rate by the orders of the Government of India which took place on 1st April 1906 has now abolished the patwár fund, all expenditure formerly met from it being now charged to provincial revenues.

Statistical information derived from the land records.

42. Mutations of title continue to increase, there being 714,696 cases instituted in 1904-05 as compared with 607,256 in the preceding year. The increase is attributed to deaths from plague and to special measures taken to remove the names of absentees. The increased volume of work was kept well in hand, attestations rising from 690,998 to 7,01,083, and the pending file, though slightly larger than last year, averages no more than 3 per village. The pending file of partitions is larger than it was, in spite of an increase in disposals, and there are heavy balances in some districts. The annual records have been prepared with punctuality and accuracy. The copying of the records destroyed by the Dharmsála fire of February 1904 was completed before the earthquake of April 1905, and the records buried in the earthquake were safely recovered.

14. Waste lands and Government estates.

Government canal colonies.

43. The annual colonization report for 1904-05 deals with, besides the Lower Chenab, Lower Jhelum, and Chunian colonies, a small colony consisting of scattered plots in the Jhang district irrigated by the Lower Jhelum Canal. The two former colonies continue to be administered by special Colonization Officers, but it is expected that the special administration of the Chenab colony will merge in 1907 in the ordinary district administration. The Chunián colony is under the Depuy Commissioner of the Lahore district, and the Jhang colony was administered during 1904-05 by the Settlement Officer. The Bill amending the Government Tenants Act (Punjab), III of 1903, has been redrafted, and the draft was in 1906 approved by the Secretary of State.

Chenab colony.

44. The total area of land allotted in the Chenab colony at the end of 1904-05 was 1,819,000 acres. An extension on the Dang Ali branch is being allotted, and proposals for further extensions known as the Burála and Kabírwála extensions are being prepared. The area sown was over 1,647,500 acres; it cannot be compared with the figures of 1903-04 which included by oversight a large number of villages outside colony limits, but it shows an advance of 106,000 acres as compared with 1902-03. Ninety per cent. of the allotted area was cropped, which is much in excess of what was originally contemplated and is a somewhat excessive proportion for the soil to bear. It is under consideration to cut down the percentage of area which may be irrigated. The failure of the cotton crop in the autumn of 1905 made the succeeding year an extremely bad one. The experiment of making grants to headmen on mule-breeding conditions continues to work in a highly satisfactory manner, and there are now over 1,100 headmen bound by these conditions. Other grantees are also taking to mule-breeding on their own account, and a large number of mares have been

branded for horse-breeding. An extension on the Dang Ali branch is being partly allotted to men of substantial position on camel service terms, and the strength of the service grantee camels will be raised to 4 corps or 4,272 camels. From 1897 (when proprietary rights first became purchaseable on the Rakh branch) to the end of 1904-05, 190 grantees in all have availed themselves of the right to purchase, of which 75 were during 1904-05. Occupancy rights were acquired by over 6,500 peasant grantees in 1904-05. Settlement proceedings continued, and first records-of-rights were drawn up for 217 villages. The creation of the district of Lyallpur has relieved the Colonization Officer of the work connected with arboriculture and municipal towns. Considerable progress has been made with the planting of avenues on roads and in village sites: there are now over 2,000 village nurseries, and a large area of between 40 and 50,000 acres has been set aside on the Kabírwála extension for an irrigated forest. Rewards have been sanctioned for the purpose of encouraging village sanitation. Three sites have been selected for new towns on the Gugera Branch Chord Railway and work on the Shahdara-Sángla Railway is being prosecuted. Good progress has been made with the metalling of roads.

Lower Jhelum colony.

45. Nearly 304,000 acres on the Lower Jhelum Canal were allotted by the end of 1904-05. The amount remaining unallotted which is fit for allotment is insufficient to fulfil the anticipations previously formed, and though all peasant grantees on horse-breeding conditions have been supplied with good land, it will probably be necessary to transfer to lands commanded by the new extensions of the Lower Chenab Canal or by new canals some of the other allotments which it was originally intended to make on the Lower Jhelum canal, and the project for an irrigated forest reserve has had to be dropped. Ten allotments have been made for regimental stud farms which are being successfully worked, but the same cannot be said of stud farm grants to native grantees, many of whom are very backward in observing the conditions of their grants. A really excellent stamp of horse is being turned out by the peasant grantees on horse-breeding conditions. The area sown out of that permanently allotted was, in 1904-05, 148,000: the year was a bad one on account of the prevalence of plague and unfavourable climatic conditions. Also 1905-06 was a bad year, owing to the failure of the cotton crops. Progress has been made in the construction of markets and village sites: nurseries of trees have been planted in all villages: trees have been planted in the village sites, but suffered from the unusual winter frosts. The extension of the Malakwál-Sargodha line to Shorkot Road was opened for traffic in May 1906, and a complete scheme of roads has been sanctioned. Horse and cattle fairs were held at Sargodha; the horse fair seems likely to become one of the largest in Northern India. A new tahsíl has been constituted at Sargodha.

Chunian colony.

46. The allotted area in the Chunián colony was, at the end of 1904-05, 73,000 acres, of which 54,000 acres were sown during the year; and only 793 acres were left for allotment. Considerable progress was made in enforcing sanitation in village sites. An area of 1,132 acres was sold by auction at the average price of Rs. 266-4-0 per acre.

Jhang colony.

47. The Jhang colony consists of 23 scattered plots of Government waste in the Jhang district irrigated by the Lower Jhelum Canal, part of which is being allotted in full ownership as compensation to landowners who have suffered by the acquisition of their land for public purposes or by the realignment of their village boundaries, and part to landowners in the neighbourhood. Land for markets or sarais has been acquired at several places on the Jech Doáb Railway.

Other Government wastes.

48. Besides the areas under colonization schemes which amount altogether to over two million acres, there are more than five million acres of unclassed forests under the control of Deputy Commissioners, of which only about a fiftieth part was leased for temporary cultivation, the rest being only fit for grazing. Five plots of waste in Montgomery with a total area of over 9,000 acres have been settled as a special reserve for the use of the silladár camel corps. Steps have been taken to revise where necessary forest boundaries in the Ráwalpindi district. A rectangular survey of the tract to be commanded by the Upper Chenab Canal project has been sanctioned, and work will be started in the cold weather of 1906. Less damage than usual was done in the Hoshiárpur district by the *chos* or hill torrents, a result partly due to scanty rainfall which also however retarded the process of protection by growth of

vegetation. Still, satisfactory progress in re-afforestation has been made: more than a quarter of the torrent-affected lands have been sown with sarkanda grass, and the amendment of section 5 (*c*) of the Punjab Land Preservation (*Chos*) Act of 1900 by Act IV of 1905 has by stopping the removal of grass for sale greatly assisted the work. The attitude of the landowners has greatly improved, and where the stricter provisions of the Act are applied a surprisingly good growth of trees and brushwood is found.

15. Wards' estates.

General.

49. Three estates were released entirely and one partially during 1904-05, in which an aggregate debt of Rs. 37,000 had been converted into an asset of Rs. 58,000 with the sacrifice of only 221 acres of land. Seven estates were added to the list (two notified in the preceding year), so that there are left 43 estates under management. Altogether debts to the amount of over six lakhs were extinguished during 1904-05. The difficulty of finding investments for accumulated capital still continues. Landed property if not situated in the immediate neighbourhood of the wards' estates requires for its maintenance a more expensive agency than its returns generally justify, and investments in guaranteed railway stock or companies, however sound, are not easily realisable. A new feature of the year's administration is the employment of the Examiner of Local Fund Accounts on the audit and inspection of court of wards' estates, a system which has already proved a most valuable aid in the administration of the estates. The Revised Revenue Circular No. 57 dealing with the Court of Wards has been sanctioned.

16. Revenue and rent paying classes.

Land Alienation Act.

50. The year 1904-05 is the fourth year of the working of the Land Alienation Act, XIII of 1900, and the results of the year bear out the conclusions already arrived at as to the satisfactory working of the Act. The steadily rising price of land gives no support to the anticipations of a permanent and serious depreciation in the value of land which were entertained by some when the Act was passed. The Act continues to be popular with the cultivators, and to impose no serious burden on the revenue officials; and the anomaly of the statutory agriculturist which has caused some inconveniences in its working will, it is probable, be abolished by an amendment, the introduction of which into the Punjab Legislature has now (1906) been sanctioned by the Government of India. As regards the effect of the Act on the credit of the cultivators, it appears that it undoubtedly has the good result of putting a stop to unproductive and extravagant expenditure: and there is at the same time appearing a wholly laudable tendency for the capital formerly employed in pandering to the wasteful tastes of the peasant to be turned to the fields of legitimate industrial employment such as investment in manufactures and wholesale trade; and this effect of the Act seems likely to exercise no small influence on the industrial development of the province. There is however nothing to show that the cultivators have been unable to find capital for their legitimate demands, although this might in places have been the case had not the liberal distribution of Government advances broken down the money-lender's monopoly; the scope for the industrial employment of capital is not likely to be so great, but that enough will be left for the legitimate needs of agriculture; and the finance of the village money-lender will now be conducted with far more business discrimination when he can no longer lend on the security of land, reckless of the solvency of his debtors.

Tenants and rent.

51. Suits for enhancement of rent rose from 474 to 698, and consequent enhancements from 356 to 494. The great majority of suits were instituted in the Hoshiárpur and Jullundur districts. Only one suit for reduction of rent was successful. There were 45 ejectments of occupancy tenants, and 6,069 of tenants-at-will.

Descent of Jagirs Act.

52. Fifteen declarations of a rule of integral descent under the Descent of Jagirs Act (IV of 1900) were published in 1904-05. Satisfactory progress has been made in Karnál, but the Sikh jagírdárs of Ambála still mantain their attitude of opposition. This it is suggested is not due so much to dislike of the principle of primogeniture in itself, or even to the clause in the agreement which empowers Government to reject an unfit heir, but to reluctance to take on themselves the invidious step of preferring one son before his brothers.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports:—

Police.—Report on the Police Administration of the Punjab for the year 1905.

Report on the working of the Criminal Tribes Act for the year 1905.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1905.

Prisons.—Report on the Administration of the Jails in the Punjab, 1905.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1905.

Registration.—Note on the Registration Returns of the Punjab for the year 1905.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1905-06.

Local Boards Administration.—Report on the working of the Local Boards in the Punjab during the year 1905-06.

And in the following tables of the Volume of Judicial and Administrative Statistics of British India for 1905-06, Eleventh Issue, *viz.*, Police (Tables VII), Criminal Justice (Tables IV), Jails (Tables V), Civil Justice (Tables III), Registration (Tables IX) and Municipalities (Tables XVII).]

17. Legislating Authority.

(See pages 83 and 84 of the report for the year 1901-02.)

18. Course of Legislation.

Meetings of the Legislative Council.

53. During the year 1905-06 three meetings of the Punjab Legislative Council were held on the 29th July and 5th August 1905 at Simla, and on the 23rd December 1905 at Lahore. Bills were introduced in Council (1) to amend Punjab Act II of 1900, the Punjab Land Preservation (Chos) Act, (2) to amend certain provisions of the Punjab Tenancy Act, 1887, and (3) to regulate the use of Motor-Vehicles in the Punjab. The Bill to amend Punjab Act II of 1900, Punjab Land Preservation (Chos) Act, was passed at the meeting held at Simla on the 5th August 1905, and after receiving the assent of His Excellency the Governor-General of India on the 24th August 1905 was published as Punjab Act IV of 1905.

Changes among Members.

54. The Hon'ble Kanwar Sir Ranbír Singh, K.C.S.I., and the Hon'ble Major Rája Jai Chand vacated their seats on the expiry of their term of two years. The resignation of Hon'ble Mr. J. Benton, C.I.E., of his seat on the Council was accepted on the 4th September 1906. The seat of the Hon'ble Mr. Alexander Anderson, C.I.E., fell vacant on his death. The Hon'ble Sir D. P. Masson, C.I.E., Kt., the Hon'ble Mr. J. M. Douie, I.C.S., the Hon'ble Sir Charles Lewis Tupper, C.S.I., K.C.I.E., and the Hon'ble Mián Muhammad Shah Dín on the expiry of their term of office were reappointed for a further term of two years. The Hon'ble Mr. Stephen Finney, C.I.E., Sirdár Partáp Singh, Ahlúwália, the Hon'ble Thákar Mahán Chand, the Hon'ble Mr. T. Gordon Walker, C.S.I., I.C.S., and the Hon'ble Malik Umar Hayát Khán Tiwána were appointed to fill existing vacancies.

Bills.

55. The following Bills affecting the Punjab were introduced into the Legislative Council of the Governor-General of India during the year on the dates below mentioned:—

14th July 1905, No. 7 of 1905, further to amend the Indian Articles of War.

18th July 1905, No. 8 of 1905, to consolidate and amend the law relating to coinage and the mint.

29th September 1905, No. 10 of 1905, further to amend the Indian Factories Act, 1881.

19th January 1906, No. 1 of 1906, further to amend the Indian Stamp Act, 1899.

19th January 1906, No. 2 of 1906, further to amend the law relating to Merchant seamen.

These all refer to the whole of British India, Nos. 8 of 1905 and 1 of 1906 including the Pargana of Spiti.

Acts.

56. The Indian Acts which apply to this Province as well as to other parts of British India and which received the assent of the Governor-General during the year are the following :—

18th July 1905, No. V of 1905, an Act further to amend the Indian Articles of War.

29th September 1905, No. VI of 1905, an Act further to amend the Court Fees Act, 1870.

26th January 1906, No. I of 1906, an Act further to amend the Indian Tariff Act, 1894.

2nd March 1906, No. III of 1906, an Act to consolidate and amend the law relating to coinage and the mint.

21st March 1906, No. V of 1906, an Act further to amend the Indian Stamp Act, 1899.

21st March 1906, No. VI of 1906, an Act further to amend the law relating to Merchant seamen.

Nos. III and V of 1906 apply to the Pargana of Spiti.

19. Police.

Condition of crime.

57. There was a considerable increase of crime in the year 1905 which after two normal years exhibits conditions very similar to those of 1902. For this there is little doubt that a severe winter and local failure of crops coupled with scarcity and plague (conditions largely resembling those of 1902) are mainly responsible. Altogether nearly 51,000 cognizable cases were reported to the Police, an increase of a little over 1,100: there were also nearly 18,500 true cases reported to Magistrates, which is about the same as last year. In Police cases, the most noticeable increase is in offences against property which numbered over 47,700, 2,500 more than in 1904. Of these 43 were *dakaitis*, 1 more than last year, but only 12 can be described as cases of true organised gang robbery, and except in Ráwalpindi and Miánwáli there was no indication of unrest on this account. In Ráwalpindi the Murree tahsíl was for some time terrorized by a gang of ruffians who made their head-quarters across the Hazára border. In the trans-Indus portion of Miánwáli a serious *dakaiti* was committed by a notorious gang from Khost in Afghán territory. There were over 12,300 burglaries, an increase of 1,770; in the Jhelum Colony and the Lahore District this seems partly due to the growth of population, but plague and scarcity were generally speaking the principal causes. There was a decrease in cattle thefts, as is usual in years of scarcity. Thefts of arms were more frequent than in 1904 and these offences were committed mostly by well-organised gangs of rifle thieves, to cope with whom considerable detective ability is required. Serious offences against the person showed a slight increase

and included 475 murders which were most frequent in Lahore (48), Ráwalpindi (40), and Dera Gházi Khán (37). 93 persons were hanged during the year. A conviction for culpable homicide was obtained in a case of *sati* in Karnál; in Ambála a remarkable case occurred in which a child was said to have been murdered in order that a pregnant woman might bathe in its blood, but the conviction was set aside by the Chief Court. Grievous hurt decreased slightly from 1904, but is sufficiently common to give rise to the suggestion that courts are inclined to be too lenient in permitting this class of offence to be compounded. There were 84 cases of coining as against 107 in 1904; in 31 cases convictions were obtained. No case of importance occurred. The village of Malsián in Jullundur maintains the notoriety it has enjoyed since 1879 as the home of a large gang of coiners who carry on their operations at places so far distant as Calcutta and Fyzabad. The large number of false coins received at treasuries and railway stations shows that this class of crime is by no means suppressed.

Working of Police.

58. The working of the Police shows a slight improvement, and in the more important classes of offences a very fair measure of success in prosecution has been obtained. There was a satisfactory increase in the number of old offenders detected, a result which was due to the work of the Finger Print Bureau. It is worth notice that in Multán and Dera Gházi Khan 20 and 19 per cent. respectively of the persons convicted for offences against property were old offenders. There is a decrease in the number of prosecutions for bad livelihood, but this is due to greater discrimination in proceeding against ring-leaders and bad characters of note instead of against the rank and file of the criminal classes. Eleven punitive posts which were in existence at the close of 1904 were continued for further periods, and eight new posts were established during the year. The practice of referring cases to *jirgás* under the Frontier Crimes Regulation continues to work with success in Miánwáli and Dera Gházi Khan. Great attention has been paid to the task of securing the good will and co-operation of zaildárs and village headmen and with excellent results. 1,409 criminals were identified out of 7,061 references at the Criminal Identification Bureau, and Faridkot and Máler Kotla were added during the year to the Native States in which the finger impression system is in force. Admirable work was done by the Police in the relief operations consequent on the Kángra earthquake, and in the arrangements connected with the Royal visit.

Changes in establishment.

59. The following changes in the strength and cost of establishment were carried out during the year under the Police reorganisation scheme. The appointment of Deputy Inspector-General, Railway Police and Criminal Investigation Department, with a staff of non-gazetted officers and men, was created, and two Deputy Superintendents were added to the cadre of gazetted officers. Three grades of European Sergeants were formed on Rs. 80, Rs. 90 and Rs. 100 per mensem, in place of the one grade on Rs. 80 which previously existed; an addition was made to the strength of Inspectors and a number of officers of this class were appointed Court Inspectors; a special grade of Inspectors on Rs. 250 per mensem was created, and the pay of the lowest grade of Inspectors was raised from Rs. 125 to Rs. 150. A considerable addition was made to the number of Sub-Inspectors, and officers of this class have taken the place of all head constables in charge of police-stations; a reduction was effected in the number of first grade head constables and their pay was reduced from Rs. 25 to Rs. 20; the pay of head constables of the second and third grades was raised from Rs. 16 and Rs. 12 to Rs. 17-8-0 and Rs. 15, respectively, and the pay of constables was raised from Rs. 7 to Rs. 8 in the case of men with less than three years' service, and to Rs. 9 in the case of men of three years' service and over. All station-house allowances and good conduct and educational allowances were abolished. An armed reserve was formed by the addition of 25 constables per district to the strength of the force.

RURAL POLICE.

Rural Police.

(See pages 88 and 89 of the report for 1901-02.)

CRIMINAL TRIBES.

Criminal tribes.

60. The Gutkas of the Lahore district who were proclaimed as a criminal tribe in November 1904, were registered for the first time in 1905, and the Biluches of two villages in Jhang were proclaimed under the Act in 1905, but their registration was pending at the end of the year. There are nearly 19,700 persons registered under the Act, of whom Sánsís, Bauriahs, Harnís and Pakhíwárás account for over 18,100. This is an increase of about 400, chiefly Bauriahs. There is a drop in the number of convictions against registered persons, but this is not entirely satisfactory as it is due to a decrease in cases under the Criminal Tribes Act and the preventive sections of the Criminal Procedure Code, while offences under the Indian Penal Code have slightly increased. On the other hand, in spite of the increase of registered persons, there is a satisfactory decrease of 96 in the number of absentees, and except in five cases the number of absentees of each tribe is less than 10 per cent. of the non-exempted members. In the five exceptions (Mahtams, Bhats, Tágus, Bilúchís and Pakhíwárás) the proportion is considerably over 30 per cent. The only tribes in whose conduct there are any signs of improvement are the Bauriahs and Harnís, the Minás of Gurgaon and the Giloi Bilúchís of Lyallpur.

Wandering tribes.

61. The crime committed by wandering tribes continues to increase; no real surveillance can be maintained over these gangs, and the law as it stands is a direct encouragement to them to continue wandering, as so long as they have no fixed place of residence they cannot, however criminal, be registered under the Criminal Tribes Act.

20. Criminal Justice.

Crime and punishments.

62. As has been already noted in the foregoing section, crime, and especially serious offences against property, went up considerably in 1905; but by far the greater portion of the increase in offences reported was due to the institution of false or frivolous complaints in the courts. The policy of systematically treating incorrigible offenders with severity which was inaugurated at the end of 1903 had the effect of considerably reducing serious crime against property in 1904, and that it has not had the same effect in 1905 is probably due to the counteracting effects of scarcity and plague, conditions in which the casual as opposed to the professional offender tends to join the ranks of crime. The punishment of whipping continues to grow in favour as a means of dealing with offenders whom it is not desirable to expose to the evil influences of jail life, but there are still a good many persons sentenced to imprisonment for a fortnight or less who should have been released under security to be of good behaviour.

False and frivolous cases.

63. The percentage of convictions to trials fell from 27 to 25, and in Gurdáspur was only 10. In this district alone the time taken up over trivial cases not one of which ended in a conviction, is computed at the full working hours of one Magistrate for the whole year. The stricter use of the powers of summary dismissal and of awarding compensation to persons falsely or frivolously accused seems the most promising solution of the problem. Steps are also being taken to reduce the number of second grade petition-writers in districts where their excessive numbers appear to encourage litigiousness.

Appeals.

64. The Punjab continues to show a high percentage of successful appeals; 22 per cent. of those convicted appealed, and in 37 per cent. of the appeals the sentences were reduced, altered or set aside or the proceedings quashed.

21. Prisons.

Jails and jail population.

65. The number of jails in the Province remained 28. A little over 38,000 prisoners were admitted, an increase of 842 over the figures of last year which is due entirely to the increased number of under-trial prisoners admitted. The number of convicts fell by 471. The daily average convict population again fell, as it has done continuously since 1900 and now stands at 10,531, the lowest figure since 1896. The new jails opened at Miánwáli and Lyallpur in

the preceding year have afforded some relief in the matter of over-crowding. A new jail is being built at Campbellpur and a site has been selected at Ludhiána for a Central Jail for long-term prisoners which will relieve Montgomery and Lahore.

Juvenile offenders.

66. The opening of the Delhi Reformatory School in October 1903 caused the admission of boys under 16 to jail to fall in 1904 from 115 to 82. In 1905 however 79 were sent to jail and only 22 admitted to the Reformatory School, so that it does not appear that full advantage has yet been taken of the existence of the school. This is to some extent however due to the fact that the rules relating to admission to the school were too stringent, and excluded boys who could have been with advantage admitted. They have since been relaxed, and it is hoped that the committal of boys to jail except in very exceptional cases will cease. The report of the Reformatory School shows that the health and conduct of the boys is generally good. Five were licensed to employers during the year and are well reported on. The reformatory system for the mental and physical training of adolescent convicts is being continued at Lahore and Montgomery, and affords ground for hope that success is being attained in the work of reforming incipient criminals.

Nature of sentences and classification of criminals.

67. Prisoners sentenced to terms of six months and under amounted to a little over 56 per cent. of the whole, as compared with 53·5 per cent. in the preceding year. On the other hand prisoners sentenced to long terms continue to be received in increasing numbers, sentences of transportation for life going up from 116 to 150. Orders have been received directing the reconsideration of the cases of transportation prisoners who owing to unfitness have not been sent to the Andamans and have remained more than 14 years in jail, and also of prisoners sentenced to cumulative sentences of more than 14 years' imprisonment, with a view to their release if the circumstances warrant such a course. It is worth remark that 37 per cent. of the convicts in 1905 had terms of solitary confinement combined with imprisonment while the percentage in the United Provinces in 1904 was 8 and in Bengal only 1. Of the convicts who were admitted to jail in 1905 14 per cent. had been previously convicted; this percentage varies little from year to year and ranges from 13 to 16, and a comparison with England, where the percentage in 1904 was 51, suggests that many prisoners escape recognition. But there has been a distinct improvement of late years in the classification of prisoners as casuals or habituals. Only 17 convicts were classed as habituals after admission to jail as compared with 50 in 1904 and 736 in 1890. Great diversity however still exists in different districts in this matter.

Discipline.

68. It is a most striking and satisfactory feature of the report that, although fetters have been only imposed for purposes of safe custody in under 2,000 cases as compared with over 3,000 in 1904, the year has been a record one in freedom from escapes, of which only one occurred, while attempts to escape declined from 16 to 3. In 1892, when fetters were imposed as a matter of course on all long-sentence convicts and the number reached 9,000, there were 28 escapes. Offences fell to a little under 38,000, a drop of 10 per cent., 69 per cent. of these being offences relating to work. The percentage of major offences to average jail population fell from 124 to 115. The employment of corporal punishment has continued to decline: 86 whippings were inflicted as compared with 101 in 1904 and 336 in 1892. Only one man got ill from the effects and his injuries were slight. The imposition of fetters is a form of punishment in increasing use and accounts for two-thirds of the 12,000 major punishments inflicted during the year. Over 3,100 convicts were released under the remission rules; over 4,400 gained extra or special marks; and more than Rs. 1,000 were awarded for unusual diligence. The question of a revision of the mark system is now before Government.

Cost, employment, and health of prisoners.

69. The average cost per head of the prison population was Rs. 67-3-7 as compared with Rs. 64-13-3 in 1904 and Rs. 63-7-3 in 1903. The increase is mainly due to a rise in the prices of food-grains. A third of the convict

population was employed on manufactures, and eight of the larger jails show substantial cash profits from this source. The average cash earnings per head of those employed on manufactures were Rs. 30-12-0 as against Rs. 34-11-0 in 1904; the decrease is due to the fact that the unsold stock in hand at the end of 1905 was considerably greater than that at the end of the preceding year: the gross profit on manufactures was substantially higher than in 1904. Paper making and litho-printing for Government purposes are the two most remunerative industries. The health of the jails was most excellent, the death-rate being only 16·34 *per mille*; only once, in 1896, has it been lower. The death-rate of males between 20 and 60 for the whole province was in the same year 31·54—a sufficiently remarkable contrast. Cholera and plague made their appearance in three jails, but owing to prompt precautions only 8 lives were lost from these causes. In July 1905 Colonel Bate, C. I. E., gave over charge of the Jail Department after over 14 years' service as Inspector-General, during which time the jail administration underwent the most far reaching reforms in every branch, and attained a standard of efficiency almost entirely due to his administrative aptitude and energy.

22. Civil Justice.

Institutions.

70. There has been a steady decrease in the volume of civil litigation for several years past, and in the year 1905 this downward tendency becomes a sharp drop with the reduction of institutions to less than 156,500, a fall of 2·6 per cent. The decrease is almost entirely confined to suits for money or moveable property, and it seems clear that its main cause is the extension by Act I of 1904 of the period of limitation in suits for money lent from three to six years. How far this decrease is likely to be permanent cannot be said until the period of limitation of suits thus extended begins to expire, as will happen in 1907. A secondary cause of the decrease in litigation is the Land Alienation Act (XIII of 1900); witness the continued decline in suits by money-lenders against agriculturists. These suits have now decreased from nearly 106,000 in 1901 to just over 62,750 in 1905, a drop in five years of nearly 42 per cent. which puts the effect of the Act in this direction beyond question. Suits for pre-emption were to a certain extent stimulated by the new Pre-emption Act II of 1905, which came into force on May 11th; but it cannot be said with certainty how far the increase was due to the agriculturist taking advantage of his improved status to eject outsiders, and how far to the institution of suits in anticipation of the passing of the Act by those who would be excluded from the right of pre-emption by its operation: the latter cause probably predominated. Matrimonial suits continued to rise, the reason apparently being in this as in the former year, that the disproportionately high mortality among women due to plague has appreciated the value of the survivors in the matrimonial market. Such suits generally take the form of a suit instituted against a widow by some relation of her deceased husband, the plaintiff alleging that the widow has gone through a form of marriage with him, whereas the woman has really married some one else against the wishes of her late husband's relatives. The registration of marriages which has been started in several Muhammadan districts has however proved an effectual check to matrimonial litigation, both criminal and civil. There appears an increasing tendency to institute suits to contest alienations of ancestral property on the ground that the alienation was not made under the stress of necessity. The decision of such cases depends to a large extent on the personal equation of the Judge, and the consequent diversity of practice is put forward as an argument for the codification of the customary law, a thorny question which may possibly come under consideration. Taken all together, the average value of suits has risen to nearly Rs. 152 from Rs. 126 in 1904 and Rs. 108 in 1903, while suits of less than Rs. 100 in value have fallen off in a marked manner. But against the decline in the number of petty suits for money and moveable property (the cause of which may, as has been said, be only temporary) must be set a rise in suits of an intricate and contentious character, which forbids the supposition that the litigious spirit of the people of the Punjab is on the wane.

Disposals.

71. The general drop in institutions has been accompanied by a decrease in disposals, but the pending file in subordinate courts has been lightened by 5,400 cases, and suits pending for more than three years have been reduced by 931. The average duration of suits was 29 days in uncontested and 51 in contested cases, an improvement in each class of one day. This result is at first sight somewhat disappointing, as the number of cases decided after a contest was roughly only 54,000, or 11,000 less than last year. But the decrease was confined to suits for money and moveables, the simplest class to decide, and the average difficulty of each case was distinctly greater than in 1904, especially in the courts of Munsifs who are being sent more land suits for disposal than used to be the case. District Judges were in eight districts employed throughout the year exclusively on civil work: the results were satisfactory in two districts only. Generally speaking there has been apparent and distinct and widespread improvement in the procedure of the courts of the Province during the last four or five years.

Execution of decrees.

72. It is still unfortunately the case that the suitor who has obtained a decree has yet a long way to go before he gets his money, the percentage of realizations to the total amount decreed remaining at 24 as in the two former years. While the chief remedy lies in greater interest taken in execution work by presiding officers, it is also true that the present Code of Civil Procedure offers many loopholes to a recalcitrant judgment-debtor, which it is hoped that the coming revision of the code will do something to obstruct.

Appellate work.

73. There has been a satisfactory decline in the number and average duration of appeals in the courts of District Judges. In Divisional Courts appeals were presented in 28 per cent. of the appealable orders passed, as compared with 24 per cent. in the previous year. The pending file of Divisional Judges continues to rise in spite of the appointment of additional Divisional Judges, and there seems little doubt but that the increased volume of work, both civil and criminal, which has come before these officers of late years demands an increase in the number of civil divisions. The cost of the additional Judges appointed during the year was little less than that of two new divisions. In the Chief Court both institutions and disposals rose considerably, the rise in disposals being due to 2½ months' work by the four additional Judges appointed to clear off arrears.

Guardians and Wards Act.

74. In January 1905 the Chief Court issued new rules under section 50 (1) of the Guardians and Wards Act, VIII of 1890, with the object of ensuring that courts should exercise a really effective control over the management of minors' estates after the appointment of guardians. A great improvement appears to have taken place in consequence of these rules. The guardian is now on appointment required to furnish a bond giving adequate security for his proper administration of the property, and is directed to produce at certain fixed intervals detailed accounts showing all transactions connected with the estate since his assumption of management.

23.—Registration.

75. There were 58,813 documents compulsorily registered in 1905; this is a slight numerical decrease, but their value rose from 389 to 419 lakhs. Sales increased by 851 in number and by 14½ lakhs in value, but mortgages fell by 891 and 3½ lakhs. The increase in sales is attributed to the rise in the value of land and to increased confidence in this form of property as an investment, while the decrease in mortgages may be accounted for partly by the very fair Spring harvest of 1905 and partly by the extension of the period of limitation for money debts. Gifts and leases tend to decrease, and the figures do not support the idea

that much evasion of the Land Alienation Act is being carried on by these means. There is a continued decline in both the number and value of deeds relating to immoveable property optionally presented for registration. This is partly due to a ruling of the Chief Court (56 of 1900) which established in the case of two competing documents, the earlier of which was unregistered in virtue of the option allowed by the Act, that notice of the prior document should be relevant, and that it should be presumed that the second transferee had notice if the original transferee was in possession. This overruled a former judgment which had made such notice immaterial and is gradually finding its way to the public. Also the rise in the value of land necessarily tends to remove transfers from the optional to the compulsory class.

24. Local Boards Administration.

Constitution of district and local boards.

76. The only new board created in 1905-06 was that of Lyallpur, the district board of Jhang being reconstituted at the same time. A report on the desirability of abolishing local boards in Ferozepore was under consideration at the end of the year.

Elections.

77. The elective system is practically not existent in the Ráwalpindi and Multán divisions, and elsewhere little interest was taken in the elections except in the districts of Karnál, Ludhiána and Siálkot.

Meetings and working of district boards.

78. In most districts the boards met 4 or 5 times during the year. The attendance at meetings was generally fair. The working of the boards has been satisfactory, and intervention by controlling officers has hardly ever been required. But it is still difficult to utilise the services of members in the practical work of administration, and it has been in the past found that the surplus funds left at the disposal of the boards after satisfying the demands of the various spending departments are so small as to leave no scope for local initiative. This is, however, an evil which the distribution of the grant of 6½ lakhs should go far to remedy, and it is hoped that the provision of sufficient funds to meet local needs will give ample scope for the development of a new interest in local government.

25. Municipal Administration.

Constitution of Committees.

79. The towns of Chiniot Road and Toba Tek Singh were constituted notified areas; the boundaries of the notified area of Gojra were extended; and the octroi limits of Siálkot and Dera Gházi Khan were revised so as to include new extensions of these towns. A system was sanctioned of electing members by wards in Ambála, a step which it is hoped will put an end to any grounds of complaint of under representation by the Muhammadan community. The proportion of elected to nominated members was changed in Ferozepore, where the municipal commissioners have for many years been the subject of unfavourable report. The constitution of Pákpattan was revised after the close of the year.

Elections.

80. There were 312 vacancies in seats filled by election, but only 107 contested elections; the percentage of voters polled varied from 45 to 69. With certain exceptions the elections appear to have roused but little interest. Trafficking in votes is reported from one municipality, but popular feeling is said to be strongly against such malpractices.

Working of Committees.

81. As regards the numbers of meetings and the attendance of members the committees of Delhi, Simla and Ráwalpindi have set a good example; the committees of the Ráwalpindi division as a whole have done well, and marked improvement is reported from the Multán division. In the case of towns where business is insufficient to make a meeting at least once a month necessary, and where this is not due to over-interference from the central office of the district, a strong case appears to exist for considering their relegation to the status

of notified areas; and it is further to be remarked that there are 35 municipalities with incomes of under Rs. 6,000 in whose case this change might be urged on grounds of economy. The work of sub-committees demands no remark, and the formal interference of Deputy Commissioners has been rarely called for and never in any matter of great importance. Orders will shortly issue on the question of reducing the central controlling establishments, and giving to committees greater powers of sanctioning expenditure.

The Municipal Account Code and peripatetic audit.

82. The great event of the year has been the introduction throughout the province of the Municipal Account Code which prescribes for all municipalities one standard set of forms of account. The substitution for the various methods formerly to be found in the municipalities of the Province, many at once cumbersome and inadequate to fix responsibility, of a clear and generally understood system, is expected to remove a fertile source of irregularities. Together with the introduction of the Code was effected throughout the province a reorganization of the municipal staffs. The peripatetic audit of Local Fund Accounts was unable to take up the accounts of all municipalities for 1905-06 in that year, but has done good work in bringing to light irregularities and awakening local interest in municipal administration. Serious irregularities were disclosed in 16 municipalities, including Hissar, Delhi, Amritsar, Dalhousie, Siálkot and Ráwalpindi, and in five others, though nothing very serious was revealed, the state of things was found to be far from desirable. The accounts of Simla, Lahore, Multán, Gurdáspur and Jullundur were, on the other hand, satisfactory.

Other rules framed by Government or by Committees.

83. Bye-laws requiring the registration of names of children were passed by a large number of municipalities in the Delhi division. The Simla bye-laws were amended in several important respects. Building bye-laws were passed or revised in about 10 municipalities, and new hackney carriage rules were framed in Multán.

Taxation.

84. The only new taxes imposed during the year were on vehicles at Hissar and Fázilka. Taxation of potable liquors was discontinued by the Simla municipality, and in consequence of the earthquake the levy of octroi was temporarily suspended in the municipalities of the Kángra district. The new Municipal Account Code has introduced a new system of collection of octroi, and, among other changes, enforces the grants of refunds on all exports without demanding proof of previous import, thus, it is hoped, obviating the taxation of through traffic. The new system entails an increase in expenditure on barriers and establishment, and it is possible that the smaller municipalities, in which the cost of collection of octroi is proportionately to income far greater than in large ones, may be obliged to resort to some less expensive form of taxation, if indeed their reduction to the status of notified areas is not indicated. The policy of free refunds introduced by the new Code has been on its trial during the year, but has not, except in Ráwalpindi and Ludhiána, been reported to have jeopardised even temporarily the financial stability of committees. It is, however, unfortunate that in Simla the refunds have amounted to as much as 24 per cent. of the gross income received from octroi. The experience of some large municipalities show that a bonded warehouse if worked on proper principles is appreciated by the mercantile community. The octroi schedules generally have had to be revised in consequence of the new Code, and considerable progress with this work has been made in the Delhi and Multán divisions. The provincial incidence of taxation (Rs. 1-11-3 per head) is largely due to the high figures for hill stations. The amount and variation of the proceeds of taxation are discussed below in section 46.

General.

85. Cholera broke out at Lahore and Shujabad and small-pox was prevalent during part of the year at Lahore, Amritsar and Ludhiána. Plague was less serious than in the preceding year; all divisions were visited by it, but in those of Ráwalpindi and Multán the towns escaped severe attacks. Serious fires took place at Simla and Kálábágh, and at Lahore the premises of the Bank of Bengal were burnt down. Drainage and water-supply schemes and other public improvements are discussed in sections 34 and 51.

26. Military (Volunteers).

Strength and distribution of Volunteer Forces.

86. The strength of the Volunteer Corps on the 31st March 1906 is reported to have been as follows :—

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant Instructors.
Punjab Light Horse.	...	Field Officers and Staff	6	...	...	6	6	4
	A	Lahore	3	9	64	76	48	...
	B	Ambála	2	8	37	47	35	...
	C	Ráwalpindi	3	8	66	77	57	...
	D	Pálampur	...	1	4	5	5	...
	...	Reservists	1	...	51	52	52	...
		Add for Supernumerary Officers	...	...	...	3	...	...
		Total	15	26	222	266	203	4
1st Punjab Volunteer Rifles.	...	Field Officers and Staff	7	...	...	7	7	10
	A, B, Cand Cadet ½ Company.	Lahore	8	37	204	249	247	...
	D	Ráwalpindi	3	14	72	89	84	...
	E	Amritsar	1	5	22	28	28	...
	F	Delhi	2	5	37	44	44	...
	G & H	Murree	5	12	46	63	56	...
	K	Ferozepore	2	9	55	66	60	...
	L	Srinagar	2	4	43	49	45	...
	L. Sec.	Siálkot	1	2	9	12	10	...
	...	Reservists	...	...	...	91	...	...
		Add for Supernumerary Officers	...	...	...	17	...	...
		Total	31	88	488	715	581	10
Simla Volunteer Rifles.	...	Field Officers and Staff	6	...	...	6	6	3
	A	Simla	2	9	37	48	46	...
	B		3	11	84	98	93	...
	C		2	8	33	43	42	...
	D		3	9	59	71	71	...
	E		2	10	42	54	50	...
	F	Sanáwar and Kasauli	1	3	96	100	16	...
	...	Honorary and Supernumerary Officers	7	...	...	7	...	...
		Total	26	50	351	427	324	3
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	9	...	...	9	9	10
	A	Karáchi City	4	5	44	53	50	...
	B	Multán	2	9	130	141	137	...
	C	Lahore	4	14	182	200	187	...
	D	Lahore	2	15	78	95	92	...
	E	Ambála	3	7	61	71	71	...
	F	Saháranpur	5	15	103	123	121	...
	G	Kotri	1	8	69	78	77	...
	H	Lahore	3	12	97	112	108	...
	I	Quetta	3	10	68	81	81	...
	K	Ráwalpindi	2	18	110	130	128	...
	L	Sukkar	4	12	80	96	93	...
	M	Karáchi City	2	9	62	73	73	...
	...	Honorary and Supernumerary Members	...	...	...	9	...	...
		Total	44	134	1,084	1,271	1,227	10

Inspections.

87. The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps and the North-Western Railway Volunteer Rifles were inspected in March 1906, and the Simla Volunteer Rifles in October 1906. The results were considered satisfactory.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below:—

Agriculture.—(1) Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1905.

(2) Annual Report of the Experimental Farm, Lyallpur, for the autumn and spring harvests 1904-05.

(3) Report on the operations of the Department of Agriculture, Punjab, for the year ending June 30th, 1906.

(4) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1905-06.

(5) Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1905.

(6) Report on the working of Co-operative Credit Societies for the year ending 31st March 1906.

Weather and Crops.—(1) Report on the Meteorology and Climatology of the Punjab for the year 1905-06.

(2) Punjab Season and Crops Report for 1905-06.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens' Lahore, for the year ending 31st March 1906.

Forests.—Progress Report on Forest Administration in the Punjab for 1905-06.

Arboriculture.—Progress Report on the Arboriculture in the Punjab for the triennial period 1902-03 to 1904-05.

Mines and Quarries.—(1) Reports on the working of the Dandot Colliery for the half-years ending 30th June 1905 and 31st December 1905.

(2) Statement showing the produce of minerals and gems for the calendar year 1905.

Manufactures.—Report on the working of the Factories Act during the year 1905.

Trade.—(1) Report on the Internal Land Trade of the Punjab for the year ending March 31st, 1906.

(2) Report on the External Land Trade of the Punjab for the year 1905-06.

(3) Report by the Registrar of the Joint Stock Companies on the working of the Joint Stock Companies in the Punjab during the year 1905-06.

Irrigation.—Revenue Report of the Irrigation Department in the Punjab for the year ending 31st March 1906.

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Agriculture.—Prices and Wages in India, 23rd issue, 1905.

Weather and Crops.—Agricultural Statistics of India, 22nd issue, Tables 3-H, 4-H, 7, 7-A and 10-E.

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Report of the Chief Inspector of Mines in India under the Indian Mines Act (VIII of 1901) for the year ending 31st December 1905.

Manufactures.—Judicial and Administrative Statistics of British India, 11th issue, Table XIX.

Financial and Commercial Statistics, 13th issue, sections XXI Cotton Mills and XXVIII Sundry Industries.

Railways.—Administration Report on Railways in India for the calendar year 1905.

Trade.—Accounts of the trade carried by rail and river in India, 18th issue.]

27. Agriculture.

Agricultural Department.

88. A most important event in the history of the province is the organization of the Provincial Agricultural Department, which was set on foot in 1904-05 and took shape in the following year, and for which a recurring grant of 2½ lakhs, supplemented out of provincial funds, was allotted from the beginning of the financial year 1905-06. The Department of Agriculture was separated from that of Land Records on 1st July 1906, and placed under a separate Director, whose head-quarters are at Lyallpur and who will also control the Agricultural Department of the North-West Frontier Province.* Sanction has been received for the construction at a cost of four lakhs of a combined Agricultural College and Research Institute at Lyallpur, the staff including a Principal and Professor of Agriculture, an Agricultural Chemist, and an Economic Botanist. It is further proposed to extend the Lyallpur experimental farm to 500 acres, and to establish a second large farm in the Eastern Punjab. Five smaller farms will be established for tracts whose conditions are peculiar, such as the sandy plains of scanty and uncertain rainfall in Hissar, Sirsa and Fázilka, and the Salt Range plateau. The establishment of the Department will be largely increased, and will provide a skilled Assistant Director for work in each district.

Experimental farms.

89. The experimental cultivation of wheat, cotton and other staples was carried on at Lyallpur. A bullock-drawn reaping machine was imported, and its working warrants the belief that it would be well worth adoption by the cultivators of the Chenab colony, where labour is scarce. Hydraulic experiments were carried on here and elsewhere in the province with a view to determining the most economical number of waterings and the most economical quantity of water required at each watering, but in both years the results were inconclusive owing to ample winter rains. Six hundred and sixteen acres were taken up in 1904-05 for a seed farm at Sargodha on the Lower Jhelum canal. The result of experiments with cotton at these two farms and elsewhere go to show that the yield of acclimatised American cotton is equal to that of good indigenous cottons, and its comparative immunity from boll-worm was noticed throughout the Jhelum colony. The classification of kinds of wheat has been brought to a close and the varieties of the Province reduced to 24 types.

Agricultural operations in the districts.

90. A good start has been made in Lyallpur, Lahore, Gurgaon, Hissar and Dera Gházi Khan in the work of selecting and distributing seed of good indigenous varieties of cotton, fineness and length of staple being subordinated to a high proportion of lint to seed. Sowings of American cotton in 1905 were ruined by boll-worm in the Chenab colony, but showed some degree of resistance on the Jhelum. Measures were taken by the department to instruct the people of the districts which suffered from boll-worm in preventing a recurrence by ploughing up and burning the cotton stalks, sowing *bhindi* as a trap crop, and reintroducing the parasitic enemy of the boll-worm. The Agricultural Assistant employed on entomological research was fully occupied in 1905-06. Interesting experiments were made with aëromotors for raising water at Miánwáli, but the results so far are inconclusive. The experimental introduction of chrome leather water buckets for wells has so far been a failure. Agricultural associations have been formed in Hissar and Lyallpur which promise to do good work.

The Punjab Veterinary College.

91. The whole of the native teaching staff and students of the Ajmer Veterinary School, consisting of 3 teachers and 20 students, were transferred to the Punjab Veterinary College on 1st April 1905, and in addition a third English Professor was appointed. There has been at the same time a great improvement in accommodation: a new out-patient clinic is being constructed, a new lecture room and laboratory have been built for contagious cases, and sanction has been given to the erection of a large anatomical room and a students'-hostel. There were 209 students under tuition, and courses of training were also provided for 65 transport dressers and 9 farriers. The high demand for graduates continues, and apparently all the men who completed their courses obtained employment. There has been a considerable extension of research work, and a satisfactory feature of the year's working is the co-operation of the College and the Provincial Department in the investigation of disease. The earnings of the College have increased, and in particular the income from the dog hospital has more than doubled, and this institution will probably soon be self-supporting.

* An incidental result of the separation is that the report on Agriculture is issued earlier than was formerly the case, and can be included in the Administration Report of the same year. So this and the succeeding two sections deal with two years 1904-05 and 1905-06.

Civil Veterinary Department.

92. The staff of the Civil Veterinary Department was increased during the year by the appointment of a third Superintendent to be in charge of the Ráwalpindi division and the Miánwáli district in addition to controlling the veterinary work of the North-West Frontier Province. The sanctioned increase in the number of Inspectors from 6 to 12 did not take place until after the close of the year under report. Ninety-six Veterinary Assistants were employed. There are now 12 Veterinary Hospitals at work in the province, of which those at Gujrát, Multán and Murree were opened during the year. These institutions are much appreciated, and treated over 26,500 cases, an increase of more than 6,000. Apart from foot and mouth disease, which is always a variable quantity and appeared very little in the year under report, there has been a steady increase in the number of cases of serious contagious disease brought to notice, as well as in the number of cases of all kinds treated in villages and in hospitals and dispensaries. Serious outbreaks of *surra* occurred in the Lahore and Ferozepore districts and were dealt with by the Army Remount Department. *Surra* and lymphangitis epizootica were scheduled in the city and civil station of Lahore under the Glanders and Farcy Act. Instructions were issued for the detection and suppression of dourine in the non-selected districts. Outbreaks of rinderpest occurred in 22 districts, but there was also a considerable increase in inoculations against this disease which rose from under 18,000 in 8 districts to over 50,000 in 21. Over 7,000 inoculations in 8 districts were made with the preventive serum against hæmorrhagic septicæmia.

Breeding operations.

93. There were 214 stud bulls in the districts on the 31st March 1906. Thirty-one bulls were supplied from the Hissar farm, and these animals are generally appreciated in the southern districts. As the supply is not sufficient to meet the demand of the province, a scheme for a bull farm at Sargodha has been sanctioned, and it is hoped to issue 50 bulls a year suitable to the northern districts of the Punjab. In the districts which have not been selected for the operations of the Army Remount Department a scheme has been sanctioned for assisting district boards in the purchase of stallions; and the standard scale to be kept up by these districts has been fixed at 62 horses and 68 donkeys, of which 20 horses and all the donkeys are replaceable by Government. Considerable difficulty has been found in obtaining donkey stallions, and the Government of India have recently offered the province financial assistance towards the purchase of donkeys from Cyprus.

Condition of cattle.

94. The failure of the monsoon of 1905 caused a very severe fodder famine in the tracts which depend on the autumn harvest for the renewal of their supplies of fodder, and the resources of the peasantry of the Delhi division were severely taxed to keep their cattle alive. *Bhúsa** was imported from the canal tracts, but in spite of special reductions of freight, the price was very high, and leaves and twigs were largely consumed. Many cattle were sold or driven away, and serious losses occurred. Some scarcity of fodder was reported from the Central Punjab, but in the rest of the province fodder was generally sufficient or even abundant.

Agricultural pests.

95. The autumn harvest of 1905 is notable for the almost complete destruction by boll-worm of the cotton crop in the Central and South-West Punjab. The failure of rain from the middle of July to the middle of September had given the plants a set-back, and during this time two pests were at work, the cotton semilooper in the Jhelum colony, and the cotton aphis (*tela*) throughout most of the province. These pests further weakened the plants at a critical time, but had disappeared before the September rain fell. After the rain the cotton grew luxuriantly, but the flowers, buds and young bolls were destroyed as they formed, by boll-worm, and so great was the damage done that plants actually vigorous and healthy produced little or no cotton. The extraordinary spread of this pest is explained by the absence from the majority of the cotton districts of the important parasite which generally checks the boll-worm, and this in its turn is probably attributable to the abnormal cold of the preceding winter. Nothing could be done to avert the calamity in 1905, but various measures have been tried, such as the sowing of trap crops and the reintroduction of the parasite, to prevent or at any rate mitigate a repetition of the calamity.

* *Bhúsa*: dry fodder made of the pounded straw of cereals or pulses.

Loans to agriculturists.

96. One and three quarter lakhs were advanced under Act XIX of 1883 for land improvements in 1904-05, an increase of a quarter of a lakh. There is a marked rise in the advances in Gurgaon, Montgomery, Lahore, Attock and Multán. Over Rs. 30,000 were remitted in Hissar which had been advanced in the famine of 1899-1900 for unbricked wells which have since proved useless. Under Act XII of 1884 there were given as advances for the purchase of bullocks and seed over three and three quarter lakhs as compared with less than one and a quarter in 1903-04; out of this over two lakhs were distributed in Kángra on account of the earthquake. The practice of personal distribution of loans by responsible officers is growing in favour. In accordance with recent orders of the Government of India the rules for the distribution of loans are under revision.

Co-operative credit societies.

97. It is however hoped that the cultivator will cease to be wholly dependent for financial assistance either on the money-lender or on Government. The system of co-operative credit had existed to a quite insignificant extent in three districts of the Punjab, when it was determined, in response to a resolution of the Government of India, dated 29th April 1904, to take measures for the active encouragement of this kind of self-help under the new Act X of 1904. An officer was appointed as Registrar of Co-operative Credit Societies in October 1904 to give advice and assistance to the people in organising such societies. The results have so far been most encouraging. By 31st March 1906, 151 societies had been registered. These for the most part fall under three types. One is the Panjáwar type (so-called from the place of that name in Hoshiárpur where it originated), where the village community manages the common land of the village and applies the income to the improvement of the land, to redeeming the mortgages of members and to making loans. The second is the Miánwáli type, the capital of which consists of voluntary subscriptions in grain not returnable for 10 years. The grain is partly kept for seed advances and partly sold for money advances, and the interest charged and other profits form the permanent indivisible capital of the society. The third form has no share capital, and operates with fixed money deposits bearing interest which it uses for lending out to members at higher rates of interest than that allowed to depositors. A combination of the last two types seems most popular.

Prices.

98. Owing to the good spring harvest of 1905 there were abundant stocks of spring food-grains in June and July, but the partial failure of the harvest in the United Provinces kept prices up. The apparent failure of the monsoon resulted in a period of wild speculation early in September, and though the September rains caused a sharp recovery before the end of the month, prices remained high throughout the autumn. There was another advance in February when the fate of the spring harvest was doubtful; after the rain dispelled all apprehensions, prices declined steadily, but in spite of the splendid harvest, continued, on the average, between warning and scarcity rates. Throughout the year prices were affected by the scarcity in the United Provinces, Rájpútána and Bombay. Actual scarcity was confined to the Delhi division.

28. Weather and Crops.

The annual rains.

99. Spring showers were frequent and general in 1905, up to the middle of March, and there were further falls in the Northern Punjab at the end of the month. Then followed three dry months. The first burst of the monsoon in the Punjab was in the second week of July 1905, when the weather was affected by a depression which, passing from the Bay across the head of the Peninsula into Gujerát and the Indus valley, produced a strong inflow of humid winds from the Arabian Sea into Upper India, and gave moderately heavy general rain over the whole province from the 11th to the 14th, and local falls in the hills and submontane tracts till the 16th. Another depression passing over the head of the Peninsula gave local rain from July 18th to 26th. From that date till the 9th September practically no rain fell except in the hills and the immediate neighbourhood. On the 6th and 7th September a depression developed off the Circars Coast, and then passed through the Central Provinces, Central India and Sind, reaching the Punjab on the 12th and breaking up in the Himálayás the same day. This storm gave general rain

over the whole of Upper India and Kashmír and caused serious floods on the Jhelum; with the dispersion of this depression the monsoon withdrew from the Punjab. With very few local exceptions the season's rainfall was in defect throughout the province. The Multán division suffered worst, less than an inch falling at Muzaffargarh and Dera Gházi Khan. The Delhi division was the next worst sufferer, Rohtak receiving only 4·40 inches instead of its normal fall of 17·46. Elsewhere the defect was not so great, but throughout the province the greater part of the monsoon rainfall fell in the storm of September 9th to 14th, which, while of the greatest value for the spring sowings and for bringing on grass for fodder, was too late to help the autumn sowings. The rainfall before September 9th was only in one plains' district (Montgomery) less than 40 per cent. in defect, and was from one-tenth to one-half of the normal in 18 districts. The winter rains began on December 12th, and rain fell at all stations except Delhi in the succeeding week. Heavy and general rain occurred in the middle of February and in the last week of March, and there were intermittent rains at other times throughout the season. With one exception the winter rains were in excess throughout the province, in most places very largely so.

The autumn harvest.

100. The early spring rains were favourable for the cultivation of sugarcane and also, in the Central and South-West Punjab, for cotton. On the first outburst of the rains in July, sowings were made on a considerable scale throughout the province, and further large areas were prepared for cultivation in expectation of continued rain. This hope was however not fulfilled, with the result that the area sown was little more than 10½ million acres, 14 per cent. below the average of the four preceding years. The two months' drought that followed withered the crops sown on unirrigated lands outside submontane tracts, and the rain in September came too late to save them, though it was beneficial to irrigated crops, and also to unirrigated crops in submontane districts which had received a few showers in August. Yields were slightly below the average on irrigated and poor to *nil* on unirrigated land: the cotton crop was practically a total loss on the canals of the Central and South-West Punjab, owing to boll-worm, and while no less than 1⅘ million acres were sown, a record figure, the matured area was only just over two-thirds of a million and the outturn of cleaned cotton 155,000 bales. Sugarcane was only sown on half the usual area on account of scarcity of seed, due to the frosts of January 1904; 135,000 acres were matured, 45 per cent. of the normal. A million acres of maize were cropped, 829,000 of spiked millet and 694,000 of great millet. Owing to the scanty rainfall fodder crops occupied a large area—two million acres. On the whole, the gross outturn of the autumn harvest was very poor indeed, amounting to only six and a quarter million acres, two-thirds of the normal. 45 per cent. of the area cropped was irrigated.

The spring harvest.

101. The spring harvest however presents a very different aspect. There was abundance of moisture in the soil for sowing, and after the bad autumn harvest large areas were available which had lain fallow or on which cotton or other crops had failed. The moisture in the soil was renewed by the December rains which enabled further late sowings to be made, and the sown area reached 17½ million acres, giving the promise of a record crop. Then followed seven weeks of dry weather which raised the gravest fears that the spring harvest would be as great a failure as its predecessor, and prices rose to scarcity rates. But the downpour of the second week in February, though too late to save the rape in the south of the province, was just in time to save the wheat, barley and gram, and the season was a record one as regards both area and yield. Only Rohtak, Delhi and Gurgaon fared badly. The total area harvested was 15½ million acres, an increase of 14 per cent. on last year, and just beating the previous record of 1901 when 15⅖ million acres were matured. The area of wheat harvested was 8½ million acres, producing 3½ million tons, the best on record; gram accounted for nearly 3 million acres, barley for nearly 1¼ million, and oilseeds for a million.

General results of the year.

102. The autumn harvest with the complete failure of the unirrigated crops except in the submontane tracts, and the damage done to the cotton crop and the contraction of the area under sugarcane was one of the worst on record.

The southern districts of the Delhi division were brought to the verge of famine and regained very little ground in the spring harvest, but the west of the province, where the autumn harvest is not so important, was in a position to take full advantage of the September rainfall, and the bumper spring crop more than compensated for the losses in the autumn. Over the whole province the area matured in both harvests was 21¾ million acres, one per cent. above normal.

29. Horticulture and Arboriculture.

Horticulture.

103. The deluge of rain that fell at Lahore in September 1905 did considerable damage to the pot plants in the agri-horticultural gardens, but the winter was favourable and very few plants suffered from frost. The nurseries have been largely extended, and when they are in perfect working order there should be no difficulty in meeting the demand for fruit trees, hedging trees, shrubs, &c., which at present exceeds the supply. The young Malta orange plants imported from Italy in 1904 are doing very well, but the pears, peaches and plums imported from England are not making such good progress. Much has been done towards improving the appearance of the gardens. The four gardens of Shahdara, Shálimár, Kudsia and Roshanára were maintained by Government as before. Gardens are maintained by many district boards, the most important of which are the Rámbágh at Amritsar and the gardens at Gujránwála.

Arboriculture.

104. Five hundred and ninety-nine miles of avenues were planted by district boards in the three years ending with 1904-05, but a quarter failed and the length of avenues added was 287 miles, chiefly in Miánwáli and the Chenab and Jhelum colonies. Fifty-three per cent. of the roads in the charge of local bodies suitable for arboriculture are now stocked. The operations caused on the whole a net loss of about a lakh and a third of rupees, but 11 district boards managed to carry them on at a profit. A sum of 1½ lakhs has been set aside for arboriculture out of the grant of 6½ lakhs made to district boards by the Government of India. The Irrigation Department planted during the triennium over a thousand miles of avenues, of which little over a third failed, and some 2,700 acres of plantations, of which a-fifth failed. The net cost was over 3 lakhs. The department has now stocked over half the length suitable for tree planting. Seventy-three miles were planted by the Public Works Department; 57 per cent. of whose roads are now planted. Their operations produced a profit of Rs. 16,000. On the whole, the result of the triennium shows that more care than previously was devoted to the subject of arboriculture. Two leading principles have been impressed on local bodies,—the necessity of enlisting the active help of the villagers, and of employing properly trained experts as District Foresters.

30. Forests.

Area.

105. There were at the end of March 1906, 9,493 square miles of forests on the books of the Forest Department, of which 116 were civil or military and the rest under the department. This is a nominal increase of 266 square miles: but with the exception of 21 square miles of disafforested land reconstituted a protected forest, the additions to area are practically all in consequence of recalculation of area or previous omissions, while the areas excluded are for the most part actual and due to the surrender of land for colonization purposes. There were at the end of the year 1,938½ square miles of reserved forests, 5,168 protected, 1,851 unclassed State forests, and 535½ leased. No area was constituted a reserved forest during the year.

Settlements, demarcation and surveys.

106. The settlement is in progress of 15 square miles of unclassed State forests in Tera, Dera Chal, &c., which have been notified as proposed reserved forests, and the report on the demarcation and settlement of the forests in the valleys of the Pabar, Rupin and Giri rivers in the Bashahr division has been submitted to Government for orders. Some 245 miles of forest boundaries have been newly demarcated, chiefly in the Ráwalpindi and Jhelum divisions, where the existence of proprietary estates completely surrounded by forests makes the demarcation of inner as well as of outer boundaries necessary. Surveys on a scale of 4 inches to the mile were completed by the Imperial Forest Survey Branch in 19 square miles of the Margalla reserved forest in Ráwalpindi and in

2 square miles of unclassed State forest and 6 square miles of military reserves in Lahore. A 4-inch boundary survey of the forests of the Salt Range in Shahpur was also completed, a length of 614 miles.

Working plans.

107. In Bashahr the working plan for 63 square miles of the leased forests in the Sutlej valley was completed and sanctioned, as was also a revision of the working plan for the 164 square miles of the remainder of the forests of this valley. The field work of a working plan for 146 square miles in the Pabar valley has been completed. In the Simla Hill States the working plan for the Keonthal forests was accepted by the State. A revised working plan for the Sutlej valley forests, 164 square miles, was sanctioned by Government. In Jhelum a working plan was sanctioned for Bela Piraghaib by the Conservator as it was of the nature of a plan of operations and did not require Government sanction.

Forest offences.

108. There were a little under 5,000 offences against forest rules, an increase of about 500 as compared with the average of the three preceding years. The tendency on the part of offenders to compound offences continues to grow, and only 822 cases were brought into court, a decrease of 138 on the three former years. There was a regrettable recrudescence of incendiarism in Kángra, and proposals for closure of forests under section 32 of the Act are under consideration. The forests burnt were chiefly those in which the people enjoy free grazing, and the wilful firing that occurred in the dry season of 1906 shows little gratitude for the grants of money and timber made in consequence of the earthquake. Cases of unauthorised felling or appropriation of produce showed a tendency to increase.

Protection from fire.

109. Eight hundred and sixty-eight square miles of forests were specially protected from fire, an increase of three square miles, and of this 33 square miles or $3\frac{3}{4}$ per cent. were burnt as compared with only $1\frac{1}{2}$ per cent. in the previous year and 1 per cent. in 1903-04. There were also burnt 10 square miles of forest not under special protective measures. The wilful incendiarism in Kángra above referred to is chiefly responsible for this bad result; in that district nearly 26 square miles were burnt, 16 of which were under special protection. The Kalesar forest, Bashahr, and to a less degree, Kulu, also contributed. Of the total area burnt two-fifths was due to incendiarism.

Protection from cattle.

110. Less than 19 per cent. of the area under the Forest Department was entirely or partially closed to grazing during the year. Considerable damage is reported to have been done by the camels of the silladar and other camel corps, who do not appear to respect the conditions on which certain reserved and other forests were thrown open to them for browsing.

Sylviculture.

111. In the pine and deodár forests where aspect and soil are favourable natural reproduction is all that can be desired; but in glades and in areas recently burnt the humus is of course deficient, and here, and in other forests, particularly those near villages where excessive grazing hardens the surface soil, there is little if any regeneration. The fires in Kángra have done great damage in this respect, and it will be years before the humus is re-established. Generally speaking, reproduction has small chance where grazing is heavy, and as more than four-fifths of the forests in the province are, as it has been above said, open to grazing, it will be seen that the natural increase of the forest growth is seriously handicapped. As regards artificial reproduction, deodár is being introduced by sowing and planting in Chamba, Bashahr, Kulu and Simla, and by planting on a small scale, in Ráwalpindi, and is also being tried in a few of the Kángra forests. Oak-seed is being sown in Ráwalpindi and Kángra. The sowings of *shísham* (*Dalbergia sissoo*), *phulai* (*Acacia modesta*) and *kíkar* (*Acacia Arabica*) in the Chenab and Jhelum river-beds has not been attended with success, nor has that of *phulai* in the Pabbi forest. The experiments with Robinia have failed in their object of restocking the lower hills, but the tree succeeds well enough at elevations over 5,000 feet. The Spanish chestnut trees at Kulu appear to be healthy. The *Pinus Pinaster* still survives in Ráwalpindi, Chamba and Bashahr, but is not vigorous. Sowings of *Pinus Jeffreyi* have

succeeded well and of *Pinus attenuata* fairly well, while *catalpa* seems more promising than either ; *Pinus coulteri* and *Pseudotsuga maerocarpa* were not a success. *Eucalyptus globulus* and *rostrata* were sown near Simla and germinated, the former profusely, the latter sparingly.

Exploitation.

112. Nine and three quarter million cubic feet of timber were removed from the forests in 1905-06, as compared with three and four-fifths millions in the previous year. Of the increase of nearly six million cubic feet purchasers account for three and a half millions, right-holders for two millions, and Government agency for a third of a million. The increase of sales to purchasers occurred chiefly in Chamba and Bashahr, where an agreement has been made for the Upper Ravi forests and Government working in other forests has been largely discontinued, and Multán, where there is a large demand for building timber. The increase under Government agency and right-holders was mostly in Kángra and Kulu and was due to relief on account of the earthquake. The amount of firewood removed decreased from 28½ to 28 million cubic feet. The value of minor forest produce was five and a half lakhs, a little more than in the previous year. Owing to the closing of the resin distillery at Núrpur operations in crude resin and its products were restricted to the tapping of pines marked for early removal, whereby about 500 maunds of crude resin were produced. The forest selected for experimental tappings of all trees of 5 feet girth and over was unfortunately burnt. Nearly 4½ million cubic feet of timber were imported into the province, an increase of a million.

Financial results.

113. The revenue for 1905-06 was 17·8 lakhs and the expenditure 12·7 lakhs, leaving a surplus of 5·1 lakhs. These figures are not so good as those of the previous year when the revenue was greater (19 lakhs) and the expenditure (9·7 lakhs) much less, but this year's expenditure includes the first payment under the new lease of the Chamba State forests. The Rája used to get Rs. 21,000 as lease money and two-thirds of the net profits ; he now gets no lease money and the whole of the net profits whereby the payments to him have risen by two lakhs and a half. The decrease in revenue is more than accounted for by a fall of 1·4 lakhs caused by the cessation of exploitation works in Kulu. If these causes were allowed for, the surplus would be only a third of a lakh under that of 1904-05, and even as it is it is half a lakh above the average of the five years before that.

31. Mines and Quarries.

Gold.

114. Small quantities of gold to the value of about Rs. 10,000 were obtained from washings in the Indus, Jhelum and Sutlej, where they issue from the hills.

Coal.

115. There were working during 1905 eleven coal mines, but coal was produced at only five. The largest, that at Dandot in the Jhelum district, was opened in 1887 ; this year it produced 43,162 tons of coal as against 31,003 last year. The year's working showed a profit of Rs. 3,560 ; that of the second half of the year was over Rs. 16,000, and the loss in the first half was due to large working expenses caused by water in the mines as well as to the low price at which coal is supplied. There were five other mines working in Jhelum all opened in 1904, but only two produced any coal—the Chiti Dand mines (15,351 tons) and the Mitha Choa mines (3,105 tons). Three mines (opened in 1904) were working in Attock, but only one produced any coal, and that in small quantities. Two mines were started in Shahpur in 1905, of which one produced a small quantity of coal. The total out-put in the province was 62,622 tons, an increase of 12,028 tons on last year, and a daily average of a little over 2,000 persons was employed.

Salt.

116. Of the sources of salt in the Punjab the cis-Indus and Kálabágh mines of the Salt Range in 1905-06 issued 2,590,000 maunds of salt, of which 2,153,000 were from the Khewrah depôt ; those of Mandi issued 98,500, and the Sultánpur salt works 93,000 maunds.

117. One thousand and five hundred gallons of petroleum were collected in the Miánwáli and Attock districts which were utilised in making gas for the barracks at Ráwalpindi. Petroleum.

118. Four tons of iron ore were produced in Miánwáli. Iron.

32. Manufactures.

119. There were shown in the factory report for 1905, 225 Government and private factories worked by mechanical power as against 191 in the previous year. The increase is mainly in the number of cotton ginning, cleaning and pressing factories, which went up to 148. Thirteen of these are also flour or rice mills, and there were in addition 16 flour and 4 rice mills. Three mills for spinning or weaving cotton were closed in the preceding year, leaving six situated at Delhi, Lahore and Amritsar. Private iron and brass works and foundries rose from six to nine, situated at Delhi, Lahore, Ráwalpindi and Lyallpur. There were as in the preceding year three breweries and one woollen mill (that at Dháriwál) shown in the returns. Of Government factories, the iron works foundries at Ráwalpindi were closed in 1904, and the flour mill and forage press at Ambála were closed in 1905. Two engineering workshops were opened at Ráwalpindi. Industries shown in the factory report.

120. One hundred and seventy-five out of the 225 factories were inspected. The result of the inspections was generally satisfactory; the provisions of the Factory Act as regards holidays and daily recess were generally observed; the sanitary conditions and arrangements were, except in the Lyallpur district, reported on as good; and the general health of the operatives was good. The arrangements for fencing and guarding machinery were generally satisfactory. There were 242 accidents in 1905 as compared with 189 in 1904. The increase is confined to minor accidents, the figures for fatal and serious accidents being the same as for last year. The average daily number of operatives employed was 22,768 men, 3,364 women and 1,068 children. The provisions of the Act as regards the employment of women and children were generally observed. One manager was prosecuted and two others warned. The general condition of the operatives is good, and in most cases the wages are higher than those paid to ordinary labourers. General condition of factories.

33. Trade.

Trade with other provinces and States in India.

121. The trade of the Punjab, a province almost wholly dependent on agriculture, is, both in volume and destination, very sensitive to the agricultural conditions not only within the province, but in other parts of India. In a normal year a principal feature of the trade of the province is the movement of wheat to Karáchi. But once let scarcity arise in the more eastern and southern parts of India, however good the harvest in the Punjab, this flow is at once checked, and while the wheat as the most valuable grain is kept up in reserve until the market shall more clearly declare itself, the effect of the suction is at once felt in the eastward movement of the coarser food-stuffs. In 1905 conditions of scarcity in Rájpútána, Cental India and elsewhere were combined with unfavourable harvests in the Punjab, where the frosts of January and February affected the outturn of wheat and oilseeds seriously and of sugar very seriously, and the cotton crop was almost entirely destroyed by boll-worm. The result was to reduce the weight of wheat exported by rail or river from nearly 32½ million to a little over 21 million maunds, and that of raw cotton by 370,500 maunds, while on the other hand all grains except wheat rose from under 10 million to over 12 million maunds. Taken altogether exports fell by close on 8 million maunds, though owing to the high price of grain the decrease in value was only a little over 29 lakhs. At the same time imports rose by nearly 10 million maunds and by the large amount of over 466½ lakhs, and were in value 372 lakhs more Total trade of the year.

than the imports. The following are the detailed figures of the trade by rail and river for the last three years :—

Years.	Imports.		Exports.	
	Maunds.	Rs.	Maunds.	Rs.
1903-04	21,934,931	15,09,47,156	36,105,550	14,66,66,094
1904-05	24,402,169	17,41 60,637	52,648,111	18,65,51,449
1905-06	34 263,417	22 08,15,208	43,175,238	18,36 15,724

The export trade in grain and pulse which represents roughly three-quarters of the whole trade shows similar fluctuations, 1905-06 coming intermediate between the two preceding years. The surplus exports of grain and pulse for 1905-06 were over 31 million maunds.

River-borne trade.

122. The trade by river with Sind is of little importance, representing in value only 3 per cent. of the exports and not more than a half per cent. of the imports. The volume of the exports contracted, but their value, owing to the high prices obtained for agricultural produce, expanded.

Imports.

123. The chief increases in imports are under raw cotton 80½ lakhs, European piece-goods 22½ lakhs, Indian piece-goods 55 lakhs, oilseeds of all kinds 40 lakhs, sugar and crude saccharine produce 140½ lakhs, and railway materials 36½ lakhs. Imports of sugar from Karáchi, Bombay and Calcutta have increased in weight by nearly 800,000 maunds and in value by over 51½ lakhs, a result due, no doubt, to the excellent beet crop on the continent of Europe, and to the inducements offered by foreign shipping companies in the shape of specially low freight charges to India: also it is believed that special rates to the ports of shipment are granted by continental railways. An advance of over 1,300,000 maunds of *gur*,* worth more than 61 lakhs, is due to the destruction by frost of the seed cane throughout the province in January and February 1905. The main decreases in imports are in gunny bags for grain 15¼ lakhs, and wrought iron and steel 20½ lakhs.

Exports.

124. The effects of the scarcity in the countries lying to the east of the Punjab were very obvious in the changes in the exports of food-grains. The export of wheat to Karáchi fell by nearly 14½ million maunds, and though this grain is less responsive to the demands of scarcity than the cheaper food-stuffs, exports to the United Provinces rose by over a million maunds and to Rájpútána and Central India by 800,000. The net decrease was 11¼ million maunds in weight and 166 lakhs in value. The export of gram and pulse to Karáchi decreased by 365,000 maunds, but that to Rájpútána and Central India increased by 705,000 and the net increase in the export of these grains was 336,000 maunds, in value 55½ lakhs. The export of other grains increased by over 1¾ million maunds. Exports of raw cotton fell by 370,000 maunds (51½ lakhs); of rape and mustard seed by 14½ lakhs; and of *gur* and other crude saccharine produce by 13½ lakhs. The export of hides and skins increased by 61 lakhs owing to a brisk demand in Europe, and of oilseeds other than rape or mustard by 20 lakhs.

Distribution of trade.

125. Karáchi maintains its position as the chief emporium of Punjab trade, though from the causes related above its percentage of the total exports fell from 57 to 39¾ per cent., and of total imports from 55½ to 35¾. The second place, but at a great distance, is taken by the United Provinces. As regards the internal distribution of trade, the cis-Sutlej territory (excluding Delhi) where the coarser food-grains are chiefly produced, shows an increase of 5 per cent. in the volume of trade, while the wheat-producing Sutlej-Jhelum territory fell off by a similar amount.

Department of Commerce and Industry.

126. On the separation of the Department of Agriculture from that of Land Records which took place on July 1st, 1906, all subjects relating to Commerce and Industry were transferred from the office of the Financial Commissioner to that of the Director of Land Records.

* *Gur*: unrefined conglomerate sugar.

TRADE WITH TRANS-FRONTIER COUNTRIES.

Afghanistan.

127. The development of the trade with Afghánistán due to the liberal policy of the Amír has been maintained, imports having increased by Rs. 7,827 to nearly Rs. 46,000 and exports by Rs. 35,032 to nearly Rs. 88,000.

Chinese-Tibet.

128. The imports from Chinese-Tibet in 1905-06 were $1\frac{3}{4}$ lakhs and the exports half a lakh. The trade continues to decrease. This is no doubt largely due to the interruption of communications caused by the earthquake in Kángra, but it also appears that the Kulu route is being ousted by that through Kashmír and that through Simla by the Dera Dún road. The imports, both of borax and raw wool, show a decline. The effects of the bonus recently allowed on the exports of tea to Tibet will not be visible till next year.

Ladakh.

129. Imports from Ladákh were a little over five and three quarter lakhs in value, and exports thither something over a lakh. Both imports and exports show a decline of nearly 50 per cent., the chief factors being *charas* among imports, which decreased by over five lakhs in value and 1,619 maunds in weight, and among exports European cotton piece-goods, which decreased by a lakh and a half. The decrease in *charas* is due to the increased duty, and raw silk (whose import increased threefold) seems taking its place as a medium of exchange. The British trade in piece-goods is being rapidly killed by Russian competition and the extension of Russian railways, and it appears that so far from the Russo-Japanese war reducing the supply of Russian goods in Káshgar, it has had the opposite result of diverting to Central Asia the goods debarred from exportation to the Far East.

Kashmir.

130. The great bulk of trans-frontier trade is with Kashmír, which in 1905-06 sent 126 lakhs of imports and received 89 lakhs of exports. Imports have increased by nearly 28 lakhs, notably raw silk, which has risen by nearly eight and a third lakhs, doubtless owing to its rising importance as a medium of exchange. Imports of *charas* have risen by nine and a half lakhs in value and 857 maunds in weight, a result which must be considered together with the decrease of 5 lakhs and 1,619 maunds in Ladákh. The net result for the province is that while the value of *charas* imported has risen by nearly $4\frac{1}{2}$ lakhs, the weight has decreased by 768 maunds. The trade has obviously been disorganised by the increased duty, and there has been a considerable diversion of route. Imports of timber, hides and wheat have increased considerably: in the case of timber imports had been kept down in 1904-05 by exceptional difficulties in floating; the increase of wheat is due to the high prices ruling in the Punjab. Exports to Kashmír have increased in value by fourteen and a half lakhs. Both European and Indian piece-goods and European twist and yarn have increased, while salt and husked rice have decreased. The decrease in the value of salt (two lakhs) might be explained by the reduction of duty, but that the weight has also decreased by 47,000 maunds.

JOINT STOCK COMPANIES.

Number of companies and new companies registered.

131. The number of companies having capital divided into shares rose during the year from 59 to 68, 11 new ventures having been launched and 2 having disappeared. Most of the new companies combine in the same venture objects of the most miscellaneous character, and for the most part may be said to be started with the view of making money in any way that may turn up: one company, besides the business of importing and exporting agents and contractors, proposes to work ginning, spinning and weaving mills and foundries and to acquire mines and quarries. In one case the registration of the memorandum of association was refused on account of the vagueness of the statement of objects. Of the two companies liquidated, one is an iron-rolling mill which never started business and the other a cotton mill. Besides these, ten others are in course of liquidation. Two companies have been registered under section 26 of Act VI of 1882,—one the Council of the Church Missionary Society in a new form and the other a company of Delhi cloth merchants and hardware dealers who have associated in order to protect themselves from railway over-charges and to expedite the clearing of goods.

Capital.

132. The nominal capital has risen from 188 to nearly 203 lakhs, and the paid-up capital from nearly 102 to 106 lakhs of rupees. The Amritsar Bank raised its nominal capital by 3 lakhs, and in all the six native banks in existence there was a considerable increase in the paid-up capital. The nominal capital of the Himalaya Glass Works, the Ganesh Flour Mills and the Amritsar Flour Mills was raised, and large increases are shown in the paid-up capital of the Amritsar Cotton Mills and the Punjab Cotton Press Company. It appears that in most native companies the defaulters are numerous. Cotton mills and cotton presses are the most popular form of investment and account for 36½ lakhs or 34 per cent. of the paid-up capital: banking and insurance take 24½ lakhs and the one brewery 18 lakhs. The least satisfactorily invested money is the 9¼ lakhs in trading companies which class includes most of the bogus and fraudulent associations. It is fortunate that only this amount has been taken up out of the 45¾ lakhs of nominal capital offered by these associations. The one Punjab insurance company, the Bhárat, is doing a good deal of business and has policies amounting to over 26 lakhs in force. Its financial position has been the subject of some criticisms in the annual report.

Prosecutions.

133. The Managing Director and other officials of the Suburban Mills Company of Delhi were prosecuted for forgery of accounts and criminal breach of trust in using the funds for a trip by the Manager to England. Another prosecution for failure to submit returns failed on technical grounds.

34. Public Works.

Expenditure.

134. The total outlay on public works in the Roads and Buildings Branch for the year 1905-06 was 67½ lakhs, of which expenditure 8¾ lakhs were Imperial, 51½ Provincial for civil works and 7¼ met from local funds.

Imperial works.

135. A little under a lakh and a half was spent on military works, chiefly in connection with the operations of the Army Remount Department. Nearly 4 lakhs were spent on original Imperial civil works, including temporary post and telegraph offices to replace those destroyed in the Kángra earthquake, and a post and telegraph office at Campbellpur. The new Imperial Civil Secretariat at Simla was completed during the year.

Provincial civil works:—Buildings.

136. The expenditure on provincial civil works included 25⅓ lakhs for original works and 15 for repairs. Buildings took up 15⅔ lakhs for original works and 3½ lakhs for repairs. New district court buildings were erected at Miánwáli, Karnál and Shahpur, a new Sessions House at Karnál, and Munsif's Courts at Una and Garhshankar in the Hoshiárpur district. A new combined tahsíl and thána was built at Hissar, and temporary tahsíls were built in the Kángra district to replace the buildings destroyed in the earthquake. A court-house was in progress at Sakesar for the Attock district officials, and the district court-treasury and tahsíl at Campbellpur was completed. A new Public Works Secretariat office was begun at Lahore. The Miánwáli district jail was completed, but for the leper ward. Seven police stations were built. Residences for officials were built at Campbellpur, Rohtak and Gúrgaon. Owing to the difficulty and expense of obtaining house accommodation at Lahore, the European clerks employed in the Secretariat offices memorialized His Honour the Lieutenant-Governor asking for help from Government. A site has been selected, and a number of detached cottages have been built as an experiment.

Communications.

137. The provincial expenditure on communications was 5 lakhs for original works and nearly 11 for repairs. The expenditure on new roads has increased steadily in the last four years, and it is intended to work up to a programme which will add 75 miles of road yearly at the cost of 6 lakhs. In the Chenab colony all roads in hand were completed, with the exception of that from Gojra to Jhang branch, and the feeder roads decided on for the Jhelum colony were in progress. Near Simla, the road from Sanjauli to Mashobra bazár was widened

to 18 feet so as to allow of carriage traffic, and the small, unlined and dangerous Sanjauli tunnel was replaced by a masonry tunnel of the width of the road.

Miscellaneous public improvements.

138. The provincial expenditure on miscellaneous public improvements was 5¼ lakhs, of which 4⅔ was on original works. Two new roads and tunnels were made at Simla in connection with the scheme for keeping cooly and mule traffic off the Mall, and the Mall at Lahore was greatly improved by being metalled from curb to curb and being flanked by a tan riding road, cinder footpaths and grass borders. Electric light was installed along the Mall and in the principal public buildings adjoining it.

The Kangra earthquake.

139. As has been related in another place, enormous damage was done by the earthquake in Kángra both to buildings and communications. The recorded book value of the buildings destroyed in the Kángra district was 3½ lakhs, and several bridges were destroyed, including the bridge over the Boner in Kángra, which had a brick arch of 140 feet span, and the Duff Dunbar suspension bridge over the Beas at Bhuntar in the Kulu Valley. Urgent work was undertaken first by a cooly corps, and then by the 34th Sikh Pioneers and Nos. 1 and 2 Companies, Sappers and Miners. The total expenditure in the Public Works Department directly due to the earthquake is estimated at little short of 10 lakhs. The Executive Engineer of Kángra, Mr. Farley, was among the victims of the earthquake.

Damage by flood and fire.

140. At Dera Gházi Khan considerable erosion took place in the bay above the old stone embankment which had silted up so satisfactorily after 1903. A strip about two miles long and averaging half a mile in width was cut away during the year, with the effect of re-opening the large bay above the old stone embankment. The centre line of the main stream now makes a big sweep through the bay before returning to its old course at a point above a mile to the north and two miles to the east of the nose of the stone embankment. This event has undoubtedly made the outlook for the town less favourable than it was before, but the flood season of 1906 has not done the damage which was feared. At Khushab on the Jhelum the bridge-of-boats was broken by a very heavy flood in September 1905, and the Kashmir road between Murree and Kohála was completely wrecked by landslips in the winter rains. Bishop Cotton School at Simla was destroyed by fire in May 1905 and is being rebuilt by Government.

Famine relief works.

141. Test works were started in January 1906 in the Gurgaon, Hissar and Rohtak districts, but only in the latter was distress sufficiently acute to make the people come to the works. By March it was necessary to start relief works, and the digging of three large tanks was started. There were under 8,000 people on the works at the close of the year under report. The improvement of the famine relief programme of the Delhi, Ferozepore and Ambála districts was continued, and a large number of surveyors were engaged to work up new projects.

Railways and Tramways.

Railway extensions in the Punjab.

142. The doubling of the line between Lahore and Amritsar was completed in 1905. This section carries an important local traffic between these two cities as well as heavy through traffic, both stations being junctions, and the doubling of the line has afforded a much desired relief. On the Ludhiána extension the line from Ludhiána to Ferozepore cantonment, a length of 77 miles, was opened on the 10th June 1905, and the extension was completed on the 10th February 1906 by the opening of the remaining distance of 77 miles from Ferozepore city to McLeodganj, thus providing a fresh route to Karáchi for the traffic of the Central Punjab. The Jech Doab Railway from Malakwál to Shorkot Road was opened in May 1906, giving a direct outlet to Karáchi for the grain traffic of the Lower Jhelum colony. Work was also done on the Sángla-Shahdára line. A line, 27 miles long, has been begun and partly opened from Amritsar to Patti. The construction of the Jullundur-Kapúrthala-Sultánpur Railway has not been begun, nor the gauge settled. The

permanent-way, curves, gradients and bridges on the Kálka-Simla line were improved during 1905, and a joint water-supply scheme was completed for supplying the Kálka-Simla and East Indian Railways and the town of Kálka. The remodelling and interlocking of Bhatinda stationyard, and the construction of one wing of the central offices at Lahore were also completed. Surveys were completed from Chúharkána to Shorkot Road, Lodhrán to Khanewál and Patiála to Jakhal, and a reconnaissance survey from Jhang *viâ* Chiniot to Sángla.

Traffic.

143. Passenger traffic continues to develop year by year. On the North-Western Railway over 30 million passengers were carried, an increase of nearly half a million, and the passenger receipts were nearly 20 lakhs in excess of those in 1904, representing a fifth of the total increase in India: measures have been and are being taken to improve the arrangements for the convenience of 3rd class passengers, a matter to which the Railway Board drew the attention of all railway administrations in March 1905. 7,237,000 tons of goods were lifted during the year, an increase of 806,000 tons in the total, but there was a considerable decrease of no less than 340,000 tons in the important wheat traffic, and on the whole the working of the line was not so profitable as in 1904, the gross earnings decreasing by Rs. 16,50,000 and the net earnings by Rs. 26,10,000.

The rates for coal on the North-Western Railway were reduced locally in accordance with the new conditions and minimum rates prescribed by the Railway Board in August 1905, and the charges for coaching and goods traffic over the Ludhiána-Dhúri-Jakhál Railway were reduced to the level of those in force over other sections of the system.

The only railways in the Punjab which do not form a part of the North-Western Railway system are the Delhi-Umballa-Kálka Railway, which is part of the East Indian system, and the Kálka-Simla Railway. On the former the earnings rose from 9⅔ to nearly 10½ lakhs, giving 6·7 per cent. on the capital outlay, the highest in the history of the line. The Kálka-Simla Railway carried 97,000 passengers as compared with 84 in 1904 and 27,000 tons of goods as against 25,000. While receipts went up, expenses fell, and the net earnings were Rs. 4,01,000 as against Rs. 2,08,000, which, however, still only represented a little over 2¼ per cent. on the capital outlay. The line was taken over by Government in 1906.

There were during 1906 collisions at Kot Sultán and Lahore stations, each resulting in the injury of 17 persons. The only serious damages by flood during the year were caused by an exceptional rise of the Chenab which interrupted traffic between Multán and Sher Shah for 96 hours.

Tramways and provincial railways.

144. A scheme for the construction of electric tramways in combination with electric lighting in Delhi by a private firm is in progress, and materials for the work are at the time of writing on the sea. A similar scheme is under consideration at Amritsar. In Lahore a license of the same description was given in 1905, but hitherto no progress has been made. A proposal by the Lyallpur district board to lay down Ewing's patent mono-rail from Golra to Samundri for the transport of agricultural produce was negatived as unsuitable to the conditions of the district. There are no railways under provincial control.

35. Irrigation.

Canal construction.

145. The site of the weir of the Upper Chenab canal has been finally fixed, and progress made with fixing the alignment and bed grading of the main line and branches, and with taking up the necessary land, while excavation on the main line has been vigorously pushed on. The total outlay during the year was 20·6 lakhs. On the Upper Jhelum project progress has been made with surveying, alignment, and other preliminary operations and a good deal of excavation was carried out. 13¼ lakhs were spent during the year. On the Bári Doáb canal the remodelling of distributaries and outlets is receiving attention, and a plan is under preparation for remodelling the main line and branches. Schemes are in progress on the Lower Chenab canal for the extension of the Burala

branch and Khiki distributary, and for the construction of a forest distributary on the Lower Gugera branch; also for extending the Sultánpakhra distributary on the Bhawána branch. On the Upper Sutlej canals extensions on the Dhapai and Malkha Hans branches effected during the year commanded an area of about 13,000 acres of Crown waste which will shortly be colonised. On the Indus canals the work was finished on the main line of the Manka canal project and started on the distributaries. A considerable amount of masonry work was done in connection with the Talai project.

General statistics.

146. The area irrigated by the canals of the province in 1905-06 was nearly 6,914,500 acres, an increase of 789,700 acres on the average of the three preceding years. The eight major works—the Western Jumna, Bari Doab, Sirhind, Lower Chenab, Lower Jhelum, Upper Sutlej, Sidhnai and Indus—account for all but 751,000 acres of this. The direct receipts were 174$\frac{1}{3}$ lakhs, an increase of two lakhs on the average of the three preceding years, in addition to which 27$\frac{1}{3}$ lakhs were credited to canals on account of enhanced land revenue, &c. The expenditure was 121 lakhs, of which 45$\frac{2}{3}$ were capital expenditure and 75$\frac{1}{3}$ working expenses; the average expenditure of the three preceding years was only 94$\frac{1}{3}$ lakhs, the increase being accounted for chiefly under capital expenditure due to the beginning of work on the Upper Jhelum and Chenab canals.

Western Jumna canal.

147. On the Western Jumna canal the season opened well, and so abundant was the rain in July that the canal was closed for ten days. But the ultimate diversion of the monsoon current along the line Hissar-Narwána-Patiála left Delhi, Rohtak and Karnál very dry, and during the cold weather there was serious scarcity in Rohtak. A continuous supply was afforded, as far as possible, from the canal, and the area irrigated, nearly 856,500 acres, is the highest on record, and about 50,000 acres more than the maximum proposed for the canal. The area of sugarcane was greatly contracted by the destruction of seed cane, caused by the frosts in the beginning of 1904; and a large area of cotton was destroyed by boll-worm, and remissions were made of nearly Rs. 70,000, chiefly on this account. To this cause is due the fall of the net income from 17$\frac{1}{3}$ lakhs (10 per cent. on capital outlay) to 16$\frac{2}{3}$ lakhs (9$\frac{2}{3}$ per cent.).

Sirhind canal.

148. The monsoon rainfall over the tract irrigated by the Sirhind canal was generally poor, but caused no loss of crops. Cotton, however, suffered very severely from boll-worm, and remissions were given on over 12,000 acres on this account alone. There was excellent rainfall for the spring harvest, and large areas were matured without canal water which in ordinary years would have swelled the irrigation returns. 1,184,700 acres were matured, an increase of 80,000 over the average of the preceding three years, which is made up of an increase of 92,000 on the Native States branches and a decrease of 12,000 on the British branches. The marked improvement in the area irrigated on Native States branches is the feature of the year and points to improved control over the distribution of supply. The profit earned on British branches was 17$\frac{3}{4}$ lakhs, 7 per cent. on the capital invested, an increase on last year of nearly three-quarters of a lakh. That on Native States branches was by collections 14$\frac{2}{3}$ lakhs, or 5·9 per cent. on the capital outlay, an increase of 2$\frac{3}{4}$ lakhs. By assessments the increase was twice as great.

Bari Doab canal.

149. Over the Bari Doab canal the monsoon rains nearly failed, but the situation was saved by the heavy rainfall early in September, which gave abundant moisture for the spring sowings. Over 1,129,600 acres were irrigated, the highest area on record (as is the area irrigated in each crop), and an increase of 200,800 on the average of the three preceding years. This is due to a favourable state of the river during the spring crop, and to the development of irrigation on new systems of the canal. The cotton crop was almost a total failure from boll-worm and nearly 5 lakhs of water-rate had to be remitted on this account alone, with the result that the net income fell from 24 lakhs to 22$\frac{1}{2}$ representing 11·3 per cent. on the capital outlay. Great damage was done to the river works by floods.

Lower Chenab canal.

150. On the Lower Chenab canal the most noticeable feature of the year was the entire failure from boll-worm of the cotton crop, of which as a rule more than 300,000 acres are matured. The total area of matured crops irrigated was

1,804,600 acres, a decrease of over 114,500 on the average of the three previous years, but there were also 346,200 acres irrigated which failed to mature, chiefly on account of boll-worm. The net revenue was 58⅔ lakhs, 20·8 per cent. on the capital invested, a decrease of 10 lakhs on the previous year. The accumulated net profits now exceed the capital invested by 9·4 lakhs.

Lower Jhelum canal.

151. On the Lower Jhelum canal great destruction was caused by boll-worm which alone was responsible for the failure of over 80,000 acres, and for over 3 lakhs of water-rate remitted. The result is that the matured area irrigated was only 445,600 acres, and the net income 1⅔ lakhs, giving a return of 1 per cent. on the capital outlay. But for the boll-worm this would have been 3 per cent.

Upper Sutlej inunda tion canals.

152. The period of flow of the four canals composing the Upper Sutlej system (the Katora, Khánwah, and Upper and Lower Sohág) varied from 156 to 171 days, in each case an improvement on the previous year. The cotton crop was a total failure from boll-worm, which was chiefly responsible for remissions of over Rs. 2¼ lakhs. Nevertheless owing to very favourable supplies in the river and to improvement in the management of the canal the matured irrigated area was nearly 371,000 acres, an increase of Rs. 1,22,500. The net profit was Rs. 84,700, representing nearly 4·9 per cent. on the capital outlay, as compared with Rs. 1,78,500 last year. 54,500 acres of Crown waste were irrigated, an increase of 22,000.

Sidhnai canal.

153. The Sidhnai and its subsidiary canals were running for 173 days as against an average of 140 in the preceding triennium. Owing to the failure of the cotton crop the net profit (Rs. 1,82,200 or nearly 14 per cent.) was less than half that of last year, but the matured area irrigated, 1,63,300 acres, exceeded the averages of the preceding three years by 24,700.

Indus inundation canals.

154. The area irrigated on the Indus inundation canals was 207,100 acres, an increase of 10,700 on the average of the preceding three years. The net profit was over a lakh, nearly 5·8 per cent. on the capital outlay, a decrease of nearly of Rs. 43,000.

Minor Irrigation works.

155. On the *Lower Sutlej inundation canals*, in spite of the head of one important canal silting up, the canals generally ran well, and the irrigated matured area would have been the largest on record but for the damage done by boll-worm. As it is, the area matured, 210,100 acres, is the second largest on record, and exceeds the average of the three preceding years by 28,100. The *Chenab inundation canals* show a profit of Rs. 32,000, less by nearly Rs. 12,000 than last year owing to the failure of the cotton. But the irrigated area, 138,600 acres, still exceeds the average of the past triennium by 20,900. The *Shahpur* Imperial and provincial canals irrigated 29,700 and 24,900 matured acres respectively: both figures are slightly less than the average of the three former years on account of the failure of the cotton crop. The Imperial canals earned 8 per cent. There was a good year on the *Muzaffargarh inundation canals* which matured 296,200 acres, an increase of over 16,000 on the previous three years. Good progress continues to be made in the amalgamation of outlets and in abandoning superfluous channels. The *Ghaggar inundation canals* matured 16,600 acres, a decrease of nearly 8,000 on the average of the last three years, and the year's operations resulted in a loss of Rs. 25,600. The *Rangoi canal* matured 2,500 acres. There was a very good flow in the *Ravi (provincial) inundation canals*, and the area irrigated, 32,300 acres, was more than 2⅛ times the average of the preceding triennium. But the year's operations resulted in a financial loss of nearly Rs. 9,000. The *Jalálpur canal* has been finally abandoned.

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subject dealt with in this chapter will be found in the following publications :—

(*a*)—DEPARTMENTAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1905.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the year 1905-06.

Excise and Opium.—Report on the Excise Administration of the Punjab, for the year 1905-06.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1905-06.

Stamps.—Note on the Stamp Statements of the Punjab for the year 1905-06.

Income Tax.—Punjab Income Tax Report for 1905-06.

Forests.—Progress Report on Forest Administration in the Punjab for 1905-06.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1905-06.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1905-06.

(*b*)—FINANCIAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, THIRTEENTH ISSUE.

Stamps.—Tables VIII 22 to 24.

(*c*)—FINANCIAL AND COMMERCIAL STATISTICS OF BRITISH INDIA, FOURTEENTH ISSUE.

Salt.—Tables III 11 and 12.

Excise.—Table V 12.

Income Tax.— Tables VIII 2, 3, 8 and 9.]

36. Gross Revenue and Expenditure.

General.

156. In the following statements of income and expenditure for the year ending March 31st, 1906, the income and expenditure of the Railways, Post Office, and Telegraph Departments and Military expenditure and Capital expenditure on Canals are omitted.

Revenue.

157. The revenue raised in the Province during 1905-06 is made up as follows, last year's figures being quoted for comparison :—

SOURCES OF REVENUE.	1904-05.	1905-06.
	Lakhs of rupees.	
Land Revenue	2,63·92	2,41·53
Irrigation (excluding land revenue due to canals)	1,82·61	1,74·23
Salt	52·91	47·02
Local Rates	47·35	42·90
Stamps	40·36	39·26
Excise and Opium	32·01	35·65
Income Tax	12·20	12·38
Forests	18·74	17·82
Police	7·43	6·94
Civil Works	7·90	6·64
Interest	3·23	3·50
Law and Justice	3·34	3·44
Tribute	4·10	3·02
Registration	2·32	2·59
Jails	1·80	1·86
Education	2·01	3·57
All other items	9·56	11·02
TOTAL RECEIPTS	6,91·79	6,53·37

Expenditure.

158. The expenditure, excluding expenditure of the Military, Railways, Post Office and Telegraph Departments, Municipal expenditure and Capital expenditure on Canals, amounted to 4,05·80 lakhs in 1905-06. The detailed items, with corresponding figures for the previous year, are given below:—

Departments.	1904-05.	1905-06.
	Lakhs of rupees.	
Irrigation	72·96	76·42
Public Works	61·56	70·18
Land Revenue	43·67	45·64
Police	37·82	43·14
Law and Justice	34·27	36·63
Medical	14·67	15·64
Education	19·50	26·44
General Administration	13·76	15·04
Superannuation Allowances and Pensions	14·23	14·78
Jails	9·50	10·38
Forests	10·12	12·63
Political	7·00	6·61
Stationery and Printing	5·07	5·32
Scientific and Other Minor Departments	4·40	5·59
Salt	3·89	3·85
All other items	21·47	17·51
Total expenditure	3,73·89	4,05·80

Abstract of income and expenditure.

159. The following is an abstract of the gross income and expenditure for 1905-06 as recorded in the books of the Accountant-General, Punjab:—

	Receipts.				Expenditure.			
	Imperial.	Provincial.	Local.	Total.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue and expenditure.	1,88,83,767	2,67,45,104	46,55,945	5,02,84,816	23,71,063	2,93,68,075	42,61,480	3,60,00,618
Contributions	...	5,69,996	80,251	6,50,247	...	80,251	5,69,996	6,50,247
Debt and remittance heads.	...	...	...	30,02,15,187	...	...	...	31,48,69,129
Total	1,88,83,767	2,73,15,100	47,36,196	35,11,50,250	23,71,063	2,94,48,326	48,31,476	35,15,19,994
Opening balance	...	...	...	94,84,922	Closing	balance	...	91,15,178
Grand Total	...	...	...	36,06,35,172	...	...	...	36,06,35,172

37. Land Revenue.

Collections of land revenue.

160. The collections of land revenue for 1905-06 are less by 22½ lakhs than as those for 1904-05 which are dicussed in Chapter II above. No details for 1905-06 are available at the time of writing.

38. Irrigation.

Capital expenditure and profits.

161. The capital invested up to March 31st, 1906, in works classed as productive was 1,101½ lakhs of which nearly 13⅔ lakhs were spent during the year, including 2 lakhs on the Lower Chenab and nearly 7 on the Lower Jhelum. The net income from these works was nearly 121 lakhs, giving nearly 11 per cent. on the capital outlay, and the net profit after paying interest was over 79 lakhs as compared with 92½ lakhs in the previous year. In addition 36 lakhs had by the end of the year been spent on the Upper Chenab and Upper Jhelum Canals, all but half a lakh within the year. No fresh capital outlay was incurred during the year on Imperial Minor Works not classed as productive, for most of which capital accounts are not kept. The excess of income over working expenses on these canals was Rs. 4,30,000, a decrease of Rs. 75,750. The profit on the two Provincial systems, the Shahpur and Rávi Canals, was only

Rs. 5,000, a fifth of what it was in the previous year. The working of the various canals has been discussed in Chapter IV where the effect of the failure of the cotton crop on the financial results of the year has been dealt with.

39. Opium and Excise Revenue.

162. The increase of 3½ lakhs shown in last year's report has been more than maintained in 1905-06, in which year an even larger rise of 4 lakhs is reported, the gross receipts having risen from Rs. 31,50,000 to Rs. 35,60,000. In this increase spirits form the principal factor, and have yielded nearly 3 lakhs more than last year. 2½ lakhs of this came under still-head duty, and are attributed to the rise in consumption due to the supply of liquor at low fixed prices in the four central Sikh districts of Ludhiána, Amritsar, Ferozepore and Jullundur. This experiment, which was inaugurated in April 1905, consists in disposing of the vend licenses at low fixed fees instead of by auction, and requiring the vendors to sell country spirit 25 per cent. below proof at a cheap price, the object being to reduce illicit distillation. The result has been to increase the licit consumption in these districts from 99,000 to 197,000 gallons, but it is believed that the greater part of this increase may safely be put down to the substitution of licit for illicit supplies. Apart from these districts there has been a slight decrease in the consumption of country spirit. The duty on coloured rum and imitation whiskies, brandies and gins was raised from Rs. 4 to Rs. 6 per gallon, with effect from April 1st, 1906, as a subsidiary result of the raising of the customs duty on imported spirits from Rs. 6 to Rs. 7, which came into effect in the February of the same year. The effects of the former measure were felt some months before it occurred, as it induced distillers to turn out large quantities of coloured rum in anticipation of the change. The receipts from opium rose from Rs. 6,04,300 to Rs. 6,47,000. The discussion of the proposal to adopt the system of Government storage of opium appears to have alarmed opium-growers, and in combination with an unfavourable season, to have caused a considerable contraction of the opium crop in the Punjab, resulting in increased imports of Malwa and Excise opium, swelling the receipts by Rs. 34,000. There was moreover an increase of Rs. 23,000 in the retail vend fees. The question of illicit smuggling from the Phulkián States still continues to engage the attention of Government.

The receipts from hemp drugs have risen by Rs. 70,000 owing to the enhancement of the import duty on *charas* from Rs. 2 to Rs. 6, this being the first year in which it has come into effective operation. On the other hand, this enhancement coupled with the closing of a large number of shops for the vend of charas has caused both consumption and imports of the drug to decline in a marked manner. Attention has been drawn to the alarming spread of the cocaine habit in the Province, and the necessary steps are being taken by the Local Government to suppress the traffic in the drug. The Darbárs of the Phulkián States have intimated their willingness to co-operate in the movement.

40. Salt Revenue.

163. The duty on salt was reduced on March 22nd, 1905, from Rs. 2 to Rs. 1-8-0 a maund. The issue price of Khewra salt was raised from nine pies to one anna a maund from 1st April 1905, and at the same time the levy of a clearance charge of six pies a maund, which was compulsorily imposed on all traders taking delivery of their salt at the Khewra depôt, was stopped and the through traffic charge of six pies a maund was reduced to three pies. These changes did not alter the aggregate cost of through traffic salt, but the cost of salt delivered locally for removal by road has been lowered by 1½ pies a maund, and any purchaser may at his option save 1½ pies more in clearance charges by doing the work connected with the clearance himself. Consumers appear to have received the full benefit of the reduction of duty, and retail prices at the chief towns which in 1904-05 varied from Rs. 2-9-3 to Rs. 2-10-8 per maund, in 1905-06 ranged from Rs. 2-1-0 to Rs. 2-3-7. Duty and prices.

Sales of salt.

164. Sales were very dull during the first five months of the year on account of a rumour that the salt duty was to be further reduced or totally abolished in connection with the Prince of Wales' visit, but for the rest of the year were brisk. 2,884,000 maunds were sold in the Kálábágh and cis-Indus division, an increase of 395,000 maunds; 985,000 from the Mandi mines, a decrease of 14,600; and 93,000 maunds of Sultánpur salt, an increase of nearly 14,900 maunds.

41. Stamp Revenue.

165. The net receipts from stamps in 1905-06 were Rs. 36,78,000, nearly two lakhs below those of 1904-05 and more than a lakh below the average of the triennium 1902-05. The sale of court-fee stamps brought in 2½ lakhs less than in the preceding year: this may perhaps be explained by the recent extension of the limitation for money suits, but this does not account for the fact that the decrease is confined to the first nine months of the year. Probably plague and scarcity deterred money-lenders from suing until the favourable winter rains brought the prospect of plenty. There is an increase under impressed stamps, half of which comes in Delhi, Lahore and Amritsar and is probably due to commercial prosperity; and the other half falls in the quarter October to December and may be attributed to borrowing caused by the poor autumn harvest. Brisk trade at Delhi and Amritsar caused a rise in negotiable instruments known as *hundis*. The special anna receipt stamp was abolished during the year.

42. Assessed Taxes.

General.

166. A triennial report was issued on this subject last year. The total net collections show an increase from Rs. 12,14,000 to Rs. 12,32,000 with a slight decrease in the number of assessees. 34 per cent. of the net collections were from incomes under Rs. 2,000. Assessees under Rs. 1,250 show a progressive increase since the passing of Act XI of 1903.

43. Forest Revenue.

167. [Forest Revenue and Expenditure have already been noticed in Chapter IV.]

44. Provincial Revenues.

168 The income and expenditure under the Provincial section of accounts during the past year have been as follows:—

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1903-04	25,25,120	2,30,60,668	2,23,85,788	32,00,000
1904-05	32,00,000	2,69,86,803	2,21,92,416	79,94,387
1905-06	79,94,387	2,73,15,100	2,94,48,326	58,61,161

The figures for 1905-06 are not final, but are liable to *correction in next year's* Administration Report. The balance of 32 lakhs at the end of 1903-04 included 20 lakhs for the extension and improvement of Simla and 2 lakhs for works of public utility. Of these grants Rs. 2,89,832 and Rs. 1,47,949 respectively were expended up to the end of the year 1905-06. The balance of 80 lakhs round at the end of 1904-05 included a special Imperial grant of 50 lakhs to give a fair start to the provincial finances under the new *quasi*-permanent settlement which came into force from the 1st April 1905. The revenue classed as provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial Rates, have been discussed

above. Provincial Rates on land include the local rate levied under the District Boards Act, 1883, which is noticed in the following section, and the Patwari Cess, the expenditure of which is shown under Land Revenue (Local). Under the new Provincial Settlement the provincial share of Land Revenue and Stamp income has been reduced from two-fifths to three-eighths and from three-fourths to half respectively, and that of Excise and Registration increased from one-fourth to half and from half to the whole respectively. Provincial has also received for the first time three-eighths of the income from Imperial Canals and made responsible for the same proportion of the working expenses and interest on debt, subject to a guaranteed net income of 28 lakhs per annum.

45. Local Funds.

Audit.

169. The work of peripatetic audit of local fund accounts was begun in July 1904, but it has not yet been found possible to complete the inspection of the whole of the 434 local bodies in the Punjab and Frontier Province. The audit has, however, already produced useful results, and necessary action has been taken in each case of irregularity reported. The most important cases were in Ambála and Hoshiárpur; in both instances the irregularities were connected with outlay on public works, an item of expenditure which affords special facilities for fraud. It is proposed to lay before Government a simple code of accounts with a view to its adoption by all district boards.

Balances.

170. The closing balances on 31st March 1906 amounted to 13 lakhs, an increase of over a quarter of a lakh on those of the preceding year. No district board overdrew its balance, and only two failed to maintain the prescribed minimum balance of a tenth of the year's receipts.

Income.

171. Excluding debt transactions, the total income of the year fell by one and three-quarter lakhs to Rs. 31,84,000. The chief decrease is one of Rs 2,45,000 under Provincial Rates, due in Kángra to remissions of land revenue on account of the earthquake, and in other districts to suspensions.

Expenditure.

172. Expenditure rose by Rs. 51,000 to Rs. 32,32,000. There is an increase of a lakh under Education, due mainly to the opening of new primary schools, towards which an annual assignment of 3 lakhs is made by the Government of India. The expenditure under the head Scientific and other Minor Departments went up by Rs. 43,000, chiefly on account of increased interest in cattle-breeding and in the maintenance of gardens; that under Civil Works rose by Rs. 65,000. The only important decrease was under the head Contributions (Rs. 2,18,000), which is accounted for principally by the special grants for primary education made from provincial revenues and by a decrease in local rate due to suspensions of land revenue.

Contributions.

173. The transactions under the head of Contributions show an increase of Rs. 86,000 on the receipt side and (as has been said) a decrease of Rs. 2,18,000 in expenditure, but are less than they might have been owing to the delay in making over the special contribution of 6½ lakhs assigned annually by the Government of India in aid of district boards. The grant has been made in the current year, and further relief has been given by the stoppage from the 1st April 1906 of the postal charges formerly paid to provincial revenues.

Civil works.

174. Of the total expenditure of Rs. 10,96,000 on Civil Works, Communications absorbed just under half. Only Rs. 1,65,000 were spent in original building works, and no works of any great importance were constructed: an irrigation channel in Ferozepore costing Rs. 8,000 and a district board office at Muzaffargarh costing Rs. 6,000 were the most important.

46. Municipal Funds.

General.

175. The introduction of the Municipal Account Code and the peripatetic audit of municipal accounts have been dealt with in section 25. The accounts of notified areas are now separately tabulated from those of municipalities, a fact which accounts generally for variations between figures of this and the preceding year.

Balances.

176. The balances of the municipalties and notified areas of the Province amounted at the close of the year to Rs. 15,51,000 in cash and Rs. 3,71,000 in investments. The balances of a few municipalities and notified areas fell below the prescribed minimum. The receipts and expenditure under the head "extraordinary and debts" amounted to Rs. 4,55,000 and Rs. 3,10,000 respectively, the items which call for notice being confined to loans. The balance of loans outstanding on 31st March 1906 was Rs 52,78,000, an increase of Rs. 1,26,000 representing the difference between the advances taken up against already sanctioned loans, and the amount repaid on account of loans advanced in previous years. The financial position of all indebted municipalities is sound, the closing balance having in every case been above the prescribed minimum.

Income.

177. The total income, exclusive of debt transactions, was Rs. 49,48,000, a decrease of Rs. 2,15,000. The gross proceeds of taxation fell by Rs 1,34,000 to Rs. 35,40,000, but in some towns such as Delhi and Lahore the closer supervision entailed by the new system of accounts has already had its effect in raising the proceeds of the tax. The realizations under Special Acts (mainly receipts from cattle pounds, hackney carriage licenses and chaukídári tax) amounted to Rs. 39,000, a nominal decrease. Municipal property and powers apart from taxation yielded Rs. 8,36,000, an increase of Rs. 1,30,000. This increase came partly from the rent of lands, houses etc., which increased mainly owing to more careful supervision in the collection of rent from permanent squatters in Delhi. There was also a rise in the sale-proceeds of land and its produce. There were, on the other hand, decreases under conservancy receipts and fees and revenue from schools, in the latter case due to the provincialization of one school at the head-quarters of each district which took place on January 1, 1905. The same cause was chiefly responsible for the decrease in the income from grants and contributions from Rs. 2,74,000 to Rs. 2,27,000. There was a fall in miscellaneous income from Rs. 4,67,000 to Rs. 3,04,000, due mainly to recasting of the heads of account in the new Code.

Expenditure.

178. The total expenditure of the municipalities of the Province, excluding debt transactions, fell by Rs. 55,000 to Rs. 51,84,000. That under the head of general administration charges, etc., amounted to Rs. 6,79,000 as compared with Rs. 5,66,000 (exclusive of refunds of octroi) in the previous year. This increase of Rs. 1,13,000 is due to the expenditure entailed by the introduction of the Municipal Account Code, including general increases in the strength and pay of establishments, and the purchase of weighing machines and new account books and forms. The expenditure on public safety was Rs. 7,30,000, much the same as last year. That on Public Health and Convenience amounted to Rs. 28,66,000, an increase of Rs. 1,91,000 due mainly to large outlay on drainage works at Multan, and on buildings and roads in Lahore, Delhi and a few other big towns. The result of the local audit shows that the expenditure on public works calls for greater control than it has hitherto received The expenditure on public instruction was Rs. 4,34,000, a decrease of Rs. 1,86,000, due to the provincialization of the head-quarter schools. Expenditure under the head of contributions was Rs. 13,000 as against Rs. 89,000, a nominal variation due to stricter enforcement of rules of account. Miscellaneous expenditure rose to Rs. 4,62,000, an increase of Rs. 1,42,000 due largely to the expenditure incurred by the municipalities of Lahore, Amritsar and Delhi on the reception of their Royal Highnesses the Prince and Princess of Wales and of His Excellency the Viceroy.

Notified areas.

179. The total income of the notified areas of the Province was Rs. 1,24,717, of which Rs. 51,359 were from taxes. The total expenditure was Rs. 83,698.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information and statistics will be found in the following reports and publications :—

Census.—Report on the Census of the Punjab and North-West Frontier, 1901, by H. A. Rose, I.C.S

Births and Deaths—Sanitation.— Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board and the Report on Sanitary Works for the year 1905. Judicial and Administrative Statistics of British India for 1905-06, Eleventh Issue, Table XIII.

Emigration.— Census Report, *as above*, and Financial and Commercial Statistics of British India, Thirteenth Issue, Table XXXV.

Medical Relief.— Notes on the Annual Statements of the Dispensaries and Charitable Institutions of the Punjab for the year ending 31st December 1905. Judicial, &c., Statistics, *as above*, Tables XIV and XV.

Report of the Punjab Lunatic Asylum for the year 1905.

Vaccination.— Notes on Vaccination in the Punjab for the year 1905-06. Judicial, &c., Statistics, *as above*, Table XVI.]

47. Details of Census.

(See pages 153—160 of the Report for the year 1901-02 and the Report on the Census of the Punjab and North-West Frontier Province, 1901.)

48. Births and Deaths.

General.

180. In 1905, as in the preceding year, the mortality caused by plague is the chief feature of the returns. But for this, a healthy year might have been counted on, as the monsoon was much below the normal and autumnal fevers consequently very little prevalent, and there was no epidemic of small-pox or cholera. Plague, however, accounting alone for a death-rate of 16·65 *per mille*, brought the total death-rate up to 47·55. This, though slightly below that of 1904, is the highest in India, a bad eminence which the Punjab has now occupied for four years in succession. The death-rate from fever, 18·4 *per mille*, was about the same as in the preceding year. Cholera only appeared in a few places and in a mild form and took but little over 2,000 lives. The mortality from small-pox—about 4,700—shows a marked decline and is the lowest since 1901. Deaths from injuries increased largely owing to the earthquake in Kángra, to which about 18,000 recorded deaths are due. The distribution of the death-rate is given in the margin. It is worth notice that since 1901 over a million persons have died from plague and nearly two and a quarter millions from fevers. The birth-rate rose from 41·5 to 44·4, a result probably due to the immunity from autumnal sickness which the Punjab enjoyed in 1904.

Fever	...	18·4
Plague	...	16·7
Small-pox	...	·2
Cholera	...	·1
Dysentery and diarrhœa	...	·7
Respiratory diseases	...	3·1
Injuries	...	1·2
All other causes	...	7·2

Plague.

181. The death roll from plague was a little over 335,000 deaths in British districts, besides nearly 55,000 in Native States. The slight decrease from last year is probably due to the severe cold of the earlier months and the long dry summer followed by an early winter. Extremes both of heat and cold are unfavourable to plague, and 1905 was a year of extremes. The disease was epidemic throughout the Punjab except in the Himálayás and in the west and south-west. The western limit of epidemic plague would roughly coincide with a line drawn from Ráwalpindi to Montgomery, were it not that the canal colonies

in Lyallpur and Shahpur push the boundary in these districts further westward. The disease was worst in Rohtak and Gurgaon, where the death-rates from plague alone were over 50 and 39 *per mille* respectively and in nine other districts over 20 *per mille* died of plague. Nearly all the towns in the infected areas were attacked; of large cities Delhi, Jullundur, Lahore and Amritsar suffered, but none very severely. The people are generally still apathetic, but they are losing their old distrust of the motives of Government, and taught by experience are slowly learning to protect themselves. Panic, an active disseminator of disease, is less common. The general policy in dealing with plague is to regard each place in which plague has appeared as the scene of a probable centre of infection in the next plague season, and during each free season while plague is dormant to treat these places so as to prevent recrudescence. Destruction of rats is for this purpose the most important means employed. This measure has been received very favourably in most of the districts of the Punjab; six or seven hundred towns or villages accepted it during 1905, and by the conclusion of the plague season in the summer of 1906 over 3,000 towns and villages, most of which were considered endemic centres of plague, had been treated with satisfactory results. Disinfection was carried out either by heat or chemicals in over 151,000 rooms during the year. It is found that although this measure will not prevent the spread of plague from a house once the rats have been infected, it will usually prevent further plague in the house itself, probably by destroying vermin and putting rats to flight. Inoculation continued to be carried out, but was only popular where there was immediate danger; over 83,500 persons were inoculated during the year, of whom more than a quarter were in the Amritsar district. Evacuation is not generally popular, but a good many villages partially evacuate their houses of their own accord when the weather is favourable, often on the first signs of rats dying. The right of refusing access to persons coming from infected places has not been much used, but has occasionally been exercised successfully. Government surveillance of arrivals was only carried on in the hill stations of Simla, Murree and Dalhousie.

49. Emigration and Immigration.

(There is nothing to report under this heading.)

50. Medical Relief.

Institutions and daily attendance.

182. There are in the British districts of the Punjab 264 State, local fund or private aided institutions at which medical relief can be obtained by the general public, maintaining 3,398 beds. The daily average attendance of in-patients was 1,944, an increase of 20 on last year: although the average attendance throughout the year is less than the accommodation, the demand for accommodation at certain seasons is very largely in excess of what can be supplied. The attendance of men shows an increase of 7 and of women a highly gratifying increase of 30 daily; children on the other hand came less to the number of 17 a day. The average daily attendance of out-patients was a little over 21,000, 500 less than in 1904: this is probably due to the fact that the year was a healthy one but for plague, treatment for which is not generally sought. There are a number of excellent hospitals and dispensaries for the treatment of female patients in connection with Christian Missions. Among them St. Catherine's Hospital, Amritsar, the Charlotte Hospital and the Victoria Memorial Hospital, Ludhiána, St. Stephen's Hospital, Delhi, and the Philadelphia Mission Hospital, Ambála, are spoken of by the Inspector-General of Civil Hospitals in terms of the highest commendation.

Nature of work.

183. There appears during the year a decline in malarial fever, spleen and eye cases and a rise in diseases of the skin and respiratory system. Over 180,400 surgical operations were performed, a record number, of which only ·15 per cent. terminated fatally. As usual, a great deal of operative work was done at the Jullundur Civil Hospital, and the Mayo Hospital and the Gujránwála, Ráwalpindi, Delhi and Hoshiárpur Civil Hospitals also contributed largely to the total.

184. The contagious hospital for Europeans at Simla was completed in 1905, and the new hospital at Amritsar was occupied during the year. The Victoria Memorial Hospital at Gujránwála was completed in 1905 and opened in the following year. New local fund dispensaries were opened at Pahárganj (a suburb of Delhi), Shahpur in Kángra, Bhalwal and Sargodha in Shahpur district, Bhawána in Jhang and Serai Sidhu in Multán. New hospitals.

185. There are leper asylums at Ambála, Bába Lakhan (Siálkot), Dakhni Sarái (Jullundur), Tarn Táran (Amritsar), Ráwalpindi and Sabáthu. Of these the first two are supported by local bodies, those at Dakhni Sarái, Tarn Táran and Ráwalpindi are managed by the Mission to Lepers in the East in consideration of provincial contributions: and that at Sabáthu (which alone has European inmates) is supported by voluntary contributions, assisted by a Government grant. Excluding Ráwalpindi, 616 lepers were under treatment, of whom 4 were Europeans. Leper asylums.

186. Eight hundred and seventy-seven patients underwent anti-rabic treatment at Kasauli, of whom 307 were Europeans and 570 natives. There were seven failures among the natives and none among Europeans. Pasteur Institute.

187. The triennial report on the Punjab Lunatic Asylum shows a record of steady progress during the last three years. The daily average of inmates was in 1905 477, a number considerably in excess of the accommodation ordinarily available, and proposals for increasing the accommodation have been sanctioned. The Sisters of the Order of Franciscans, who have for the last three years undertaken the charge of the female patients, received the special thanks of Government. Lunatic asylum.

188. The cases referred to the Chemical Examiner and the analyses performed by him are less than last year. The ratio of detection is about the same except in blood cases, in which the proportion has improved, and in the case of human poisoning the proportion, 65 per cent., the same as that of last year, is considerably below that of 1903. Lack of discrimination in making references and carelessness in preparing cases contribute to the percentage of failure in detection. The poison most usually employed in human cases is arsenic, and after that opium, dhatúra and mercury; for cattle poisoning arsenic is almost exclusively used. Chemical Examiner.

51. Sanitation.

189. The Sanitary Board met five times during 1905 and submitted to the Local Government for sanction a water-supply scheme for Ludhiána at a cost of 4 lakhs, drainage schemes for Chiniot, Jagraon and Amritsar, a project for metering the pipe lines at Lahore, and a suburban drainage scheme at the cost of $3\frac{3}{4}$ lakhs for Delhi. All these schemes have received the sanction of Government except the last, which is under consideration. Grants-in-aid amounting in all to nearly Rs. 30,000 were sanctioned for drainage schemes at Gujrát, Ballabgarh, Khudián, Pind Dádan Khan, Ambála and Thánesar, and for a water-supply scheme at Núrpur. Rules have been issued by the Punjab Government delegating to the Sanitary Board the power to exercise its discretion in sanctioning grants-in-aid from provincial revenues. No definite orders have yet been received regarding the hydro-electric scheme for increasing the water-supply of Simla and at the same time for lighting the station with electricity. The Simla municipal committee has applied for sanction to undertake this work. New water mains were laid at Simla and Lahore, and proposals made for preventing waste at the latter place; the new water-works at Amritsar were handed over to the municipal committee; progress was made in the execution of drainage schemes at Amritsar, Sargodha, Ráwalpindi, Delhi, Multán, Ambáia, Ferozepore, Muktsar, Jagraon and Gujrát. The work of draining and improving the Lahore Mall was completed, and adds greatly to the amenities of the station. The new water works of Sargodha were proceeded with and those of Ambála improved. A scheme for a conservancy tramway at Lahore to carry away refuse from the city was submitted to the Sanitary Board for consideration.

52. Vaccination.

190. Nearly 749,000 vaccinations were performed during 1905-06, giving an increase of over 6 per cent. on the average of the previous five years. The increase is entirely in primary vaccinations; revaccinations show a marked decrease, especially among females. There is a strong prejudice against revaccination, especially in the case of females, and this is one of the main obstacles in the path of preventive work. The proportion of successes in primary operations excluding unknown cases is about the same as last year: revaccination shows a greatly improved percentage of success, nearly 84. The glycerinated lymph treated with chloroform which is manufactured at the Central Vaccine Institute has proved most successful. As already stated, there were very few deaths from small-pox this year.

CHAPTER VII.

INSTRUCTION.

[For detailed information see the Annual Report on Public Instruction in the Punjab for 1905-06, and the Judicial and Administrative Statistics of British India, table X, Education, and XII, Printing Presses and Newspapers.]

53. General system of Public Instruction.

(See paragraphs 616-35 of the report of 1901-02.)

Public Instruction.

54. Education.

General statistics.

191. There are in British territory 3,762 public educational institutions with nearly 211,500 scholars. This is an increase of 706 schools and 26,700 scholars and is due to the movement for extending primary education whereby 699 primary schools were opened. Private schools on the other hand have decreased by 231 and now number 3,636 with about 63,300 scholars. Taking public and private institutions together, the result is that in every 100 towns and villages there are 19 boys' and 3 girls' schools, while of every hundred boys of school-going age 15 go to school, and of every hundred girls only 2. The closing of the Church Missionary Society College at Amritsar reduced the number of Arts Colleges to 10 including the Oriental College, Lahore. Public Secondary Schools increased by 3 to 324 and schools for special instruction by 5 to 35. Public Primary Schools numbered 3,389, an increase of 699. 62 per cent. of the Secondary Schools which by reason of their adopting the departmental requirements are classed as public, are managed by Government or local bodies and the remaining 38 per cent. are under private management as Aided or Unaided Schools. Of Public Primary Schools 70 per cent. are under public management. The expenditure on education was over 49½ lakhs, an increase of over 8½ lakhs. The sources from which this expenditure is met were Imperial revenues 1½ lakhs, provincial revenues, 20 lakhs (an increase of nearly 6 lakhs); fees, 10 lakhs; district funds, 7 lakhs, municipal funds, 3 lakhs, and other sources, 8 lakhs.

Public Examinations.

192. Over 10,000 boys passed the Upper Primary examination, and over a thousand the Middle Vernacular. The Matriculation examination, now generally necessary as a qualification for employment in Government service, was passed by 1,172 out of 2,612 boys who went up for it; 920 candidates appeared in Arts examinations and 429 passed; in Oriental language examinations 320 out of 612 were successful, and 64 out of 89 passed the First Engineering examination. 114 out of 290 obtained their B.A. and 13 out of 46 succeeded in proceeding to the degree of M.A. There were 2 Bachelors of Science and 14 of Laws, 1 Bachelor of Medicine, and 18 Licentiates in Medical Science, and 1 Master of Oriental Learning.

The Punjab University.

193. The 25th Convocation of the Punjab University was held on 23rd December 1905, in the new University Hall, whose construction is one of the features of the year: 194 graduates were admitted to the various degrees. The new regulations drafted in accordance with the Indian Universities Act of 1904 received the sanction of the Local Government, and are now in force. All the colleges of the Province are now affiliated to the University. The first examination for the Degree of Bachelor of Teaching was held early

in the year. Two medals have been endowed, the Arnold Silver Medal by the Anjuman-i-Islámia, and the Sir Harnám Singh-Rivaz Gold Medal by the Hon'ble Kanwar Sir Harnám Singh, Ahlúwália, K.C.I.E.

Arts Colleges.

194. Owing to the closing of the Church Missionary Society College at Amritsar the number of Arts Colleges in British territory was reduced to 9 (1 second grade), with 1 Oriental College. The attendance in the Arts Colleges rose from 1,196 to 1,315 and that in the Oriental College fell from 86 to 81. Of the Arts Colleges, the Dayánand Anglo-Vedic College (346), the Forman Christian College (372), the Government College, Lahore (207), the Khálsa College, Amritsar (91), St. Stephen's College, Delhi (96) and the Islámia College, Lahore (92), all increased their numbers. A scheme for the transference of elementary scientific education from the medical to the arts curriculum has been developed during the year, and a chemistry class has been added in the Government College, Lahore. The tutorial system was introduced in St. Stephen's College and the Dayánand Anglo-Vedic College. In addition to the above there are, as in last year, colleges in Native territory at Patiála, Bahawalpur and Kapurthala.

Professional education:— Law, Medicine and Veterinary Science.

195. Last year's increase in the numbers at the Law College was not maintained: except in that year they have steadily declined since 1898-99 and are now only 88 as compared with 170 in 1905, and 154 in 1903. The Medical College and School also show a decrease in numbers, but in their case it is the first that has had to be recorded for many years; the average number in the College fell from 274 to 260 and in the school from 325 to 292. In the case of the school, the two main causes are the restriction of admission rendered necessary by the insufficiency of material for anatomical purposes, and the raising of the literary test to that of the Entrance Examination. The North India Medical School for Christian Women at Ludhiána had 38 students on the rolls and earned the commendation of the Inspector-General of Civil Hospitals for, the useful work it performed. Of native systems of medicine, the Yúnáni system is taught through the medium of Arabic at the Delhi Madrassa-i-Tibiya where an arrangement also exists for a course of lectures on Anatomy and Surgery by an English Doctor; and classes in the Vedic and Yúnáni systems are maintained by the Punjab University, the former at the Dayánand Anglo-Vedic College and the latter at the Islámia College. The Veterinary College, Lahore, had 209 students on the rolls as against 153, an increase largely due to the transfer to it of the staff and students of the Ajmer Veterinary School.

Technical education.

196. There is an increase of numbers at the Mayo School of Art, Lahore, from 333 to 380. The results of the examinations are again very satisfactory, and 31 passed students of the year from the school and the Engineering Class are employed on salaries ranging from Rs. 15 to Rs. 100. During the year a boarding house was opened in hired buildings and is already full. A prize scheme has been introduced with competitions in Wood-carving, Metal-work (Repoussé), Metal-work (Blacksmith), Modelling and Decorative Painting. It is hoped to hold an annual exhibition of the work of the students in this connection. The amount of practical work done has been much greater than usual, due principally to the Royal visit, and included the decoration of the dining hall at Government House, Lahore, painting and decorating the large Montgomery Hall, Lahore; alterations and improvements to the Circuit-house, Delhi; the decoration of Government House, Peshawar; designing and erecting triumphal arches; designing and executing one large and several small metal lamps for the Táj at Agra in accordance with Lord Curzon's directions; and various artistic improvements in the Lahore Museum. A series of Industrial Art Pattern Books is being prepared by Mr. Percy Brown, and the one on "Wood-work," with a series of plates, is now nearing completion. The school was honoured by a visit from Her Royal Highness the Princess of Wales, accompanied by His Honour the Lieutenant-Governor and the Earl and Countess of Shaftesbury, on November 29th. The Government School of Engineering is also for the present under the Principal of the Mayo School of Art, and has been taken over from the control of the Punjab University. There were 98 students on the rolls against 57 last year, and 12 students succeeded in gaining employment on salaries ranging from Rs. 30 in

Amritsar to Rs. 200 in South Africa. A series of 12 Magic Lantern Lectures were given by the school of Art; three were delivered by ladies for ladies only and are said to have been greatly appreciated by the *pardanishín* ladies for whom they were intended. The Railway Technical School, Lahore, had 334 names on the rolls, of whom 288 were of the artizan class, for the most part sons of men employed in the North-Western Railway workshops. Muhammadans greatly predominate. With the exception of the infants all learn drawing, and most woodwork; smith's work does not seem popular. Evening classes are established in connection with the same school and meet three times a week. There are a good many other technical institutions of various descriptions in the Province. Industrial schools are maintained by the municipalities of Amritsar (162 students) and Delhi (57) and by the District Board of Ludhiána (123). The Victoria Diamond Jubilee Hindu Technical Institute of Lahore which receives a grant from municipal funds, teaches carpentry, smithing, photography, typewriting, shorthand, rubber stamp making and engraving, and had 83 boys on the rolls. The Dayánand Anglo-Vedic College, Lahore, has classes in tailoring, engineering and drawing. Missions are doing good work in teaching the simpler crafts to children of the poorer classes, notably at Delhi, Gurgaon, Palwal, Pasrúr, Clarkabad and Ludhiána. The Gandharva Mahavidyálaya School continues to teach Hindu music, and the Multán harmonium school teaches the harmonium and singing. There is a Clerical and Commercial School at Amritsar with 67 on the rolls which teaches book-keeping, drafting, short hand and type-writing and the native system of accounts. Similar classes are maintained at the Central Model School, Lahore, and the Mission School, Ráwalpindi.

Secondary Schools for Boys.

197. The opening of an Anglo-Vernacular High School and a Vernacular Middle School has raised the number of Secondary Boys' Schools in British territory to 288, which are made up of 89 High and 89 Middle Schools on the Anglo-Vernacular side (of which 86 are Government or Board Schools, 65 Aided and 27 Unaided), and 2 Vernacular High Schools (1 Aided and 1 Unaided) and 108 Vernacular Middle Board Schools. The number of pupils in the Secondary stage of Anglo-Vernacular Schools is 16,341, an increase of 675, and in Vernacular Schools 4,904, a decrease of 135. The number of agriculturist students rose from 4,510 to 4,927. In the Entrance and equivalent examinations the number of public candidates has been higher in every examination, but the percentage of passes has been lower. On the whole there is a record of good work in the Secondary Schools. There, however, appears a general tendency on the part of the public to despise a purely vernacular education on account of the superior market value of English, and this manifests itself in some Middle Schools in the neglect of the Third Middle Classes especially in Mathematics and the Vernacular subjects; it being equally significant that only eight candidates appeared for the Vernacular Entrance Examination. The experience of the Department is, on the contrary, that a much better grounding is given in Vernacular Middle Schools than in Anglo-Vernacular, and that boys who complete the Middle School course in a Vernacular School and then join an Anglo-Vernacular High School are on the whole better educated than those who have taken a complete course in an Anglo-Vernacular School; and the present policy, in continuation of that which abolished the Anglo-Vernacular Middle Examination, is to strengthen Vernacular Schools up to the Middle Standard, rather than to encourage the early acquisition of English.

Primary Schools for Boys.

198. The number of public Primary Schools for boys in British territory has risen from 2,347 to 2,930, of which 2,107 are Government and Board Schools, 674 Aided and 149 Unaided. The Aided Schools have increased nearly in the same proportion as the Government and Board Schools, many of those returned as Unaided last year having now qualified for a grant. Pupils have increased roughly from 106,500 to 127,000 and there are now over 61,000 agriculturists among them as against under 51,000 last year. Zamíndári Schools have decreased to only 156 and seem likely to be superseded by the new type of village school. 811 Indigenous Schools were examined

for grants, an increase of 197. Indigenous standards are no longer purely individual tests and hence the pupils were examined collectively. The old system of results-grants has been abolished and the block-grant system introduced instead, and this change it is expected will foster the growth of these institutions, and improve the character of the work done by them in the extension of primary education among classes not reached by the ordinary schools. Gurmukhi Schools or classes numbered 35. Schools for low caste children fell from 64 to 53, the American Presbyterian Mission of Gujránwála having closed 8 out of the 20 schools maintained by them. On the whole, the year under review marks a distinct advance in the extension of primary education in consequence of the efforts made throughout the Province in furtherance of the policy, which a favourable condition of finances has enabled Government to embark on, of the diffusion on a more extended scale of elementary education among the masses of the people. 614 new schools were opened during the year with an average attendance of 33 pupils. The enhanced salaries now offered to Primary School teachers will it is hoped increase the supply of qualified men, which is at present far from adequate to the demands of the Province. The abolition of individual tests applied by inspecting officers, the substitution of block-grants for results-grants and the introduction of the new Rural School Course are measures of reform carried out during the year.

Training institutions.

199. The institutions for the training of teachers are the Central Training College and Model School, Lahore, Normal Schools for Men at Lahore, Delhi, Multán, Jullundur and Ráwalpindi; a Normal School for Women at Lahore; and St. Bede's College and Auckland House at Simla, which last two train women teachers for European Schools. There are also six training classes for girls attached to various schools.

The number of students at the Central Training College has gone up in the last four years from 76 to 188. The results in the various examinations compare most favourably with those of former years, and in professional subjects 97 per cent. of the candidates passed. Kindergarten work now forms an important part of the course, Drawing is carefully taught, and Shorthand forms part of the curriculum of the Clerical and Commercial Class. 40 students passed the St. John Ambulance Association Examination, the first examination of the kind held in the Punjab. Physical education is well attended to; games twice a week are compulsory and 133 Gymnastic Teachers' certificates were obtained. A gymnasium and swimming bath are being constructed. All but 3 of the students lived in the boarding-house and their conduct was good. The Central Model School continued to do good work, and its numbers rose to 848. There was an increase in the numbers of each of the 5 Normal Schools for men except Delhi, the total being 422. Continued improvement is shown in the training of students in practical agriculture in all schools except Delhi, which has only recently secured a piece of land for this purpose. At Multán the circular of the Director of Agriculture on the protection of cotton crops from insects was acted on with good results. Practical Mensuration and Drawing continue to be taught in the Normal Schools, and Physical Education was well attended to. The evening continuation classes for Europeans and Natives, which were closed in December 1904, were re-opened and have been fairly well attended. The Normal School for Women has made good progress and now has 53 students. The difficulty that was anticipated of getting teachers to go out and take up appointments has not been realized: they seem to take an interest in their work, and are anxious to go where proper arrangements can be made for them. There is at present a lack of suitable boarding accommodation for the students. St. Bede's College, Simla, passed out 14 trained teachers for European Schools and a similar training class was opened in connection with Auckland House School in March 1906. There are now 3,580 out of 7,066 teachers in boys' schools who are both trained and certificated and 50 out of 739 in girls' schools.

Female education.

200. The opening of an Aided Anglo-Vernacular High School increased the number of High Schools for girls to 12: Middle Schools remained 24 in number, half of which were Vernacular and half Anglo-Vernacular. In these 36 Schools were close on 560 pupils in the Secondary stage. Primary Girls' Schools rose by 116 to 459 with over 19,000 pupils. The foremost districts for female education are Lahore and Amritsar; in secondary education they are about equal in importance, but the Primary Schools for girls are far more numerous and prosperous in Amritsar, the home of Sikhism, a religion which has always especially encouraged the instruction of women and the script of whose sacred books is the general vehicle of female education. The Delhi Division is the most backward. Schools for Muhammadan girls are generally few and not prosperous, the custom of *parda* and the language difficulty being chiefly to blame. Examination results were very satisfactory. Over 1,500 girls passed various examinations, 23 passing the Entrance Examination of the Punjab University. Domestic Economy is taught at the Siálkot Mission School and in one or two other Boarding Schools; Needle work seems as a rule to have made little progress except at Mission Schools. On the whole steady progress appears to have been made everywhere; the upper classes are, it is reported, beginning to see the advantage of educating their girls, and are even anxious to have them brought up under European supervision. The enlargement of the inspecting staff has enabled many schools to be visited which were formerly passed by and gives assurance of the interest of Government in female education. This and the sending out of the first batch of fully-qualified teachers from the Normal School for Women are new factors of the best presage for the growth of female education in the future, and it deserves note that of the six that received the senior certificate all received appointments with salaries of from Rs. 20 to Rs. 30 a month.

Education of Europeans.

201. The most important subject of the education of the rapidly growing domiciled European population has continued to receive the careful attention of Government. There has been no increase in the number of schools, but considerable sums have been spent in improving the efficiency of the existing institutions: notably building grants of Rs. 50,000 and Rs. 70,000 were made to the Convent School, Murree, and the Cathedral Girls' High School, Lahore, and special grants of Rs. 20,000 and Rs. 46,000 to Auckland House Girls' School and Bishop Cotton School at Simla. A grant of over two lakhs was also sanctioned as grants for building and appliances to be provided for in the estimates of 1906-07, the main item being Rs. 1,84,000 for rebuilding Bishop Cotton School. The rebuilding of the Lawrence Memorial Asylum, Murree, for which a grant of Rs. 78,000 was sanctioned in 1904-05, is near completion. The great obstacle in the way of progress in boys' schools is the lack of competent teachers, a difficulty which is felt more keenly as time goes on. The supply of trained women teachers from St. Bede's College prevents a similar state of things existing in girls' schools, which consequently show a far more marked tendency to improvement.

Education of Muhammadans.

202. The percentage of boys at school on those of school-going age is among Muhammadans 13 as compared with 16 for Hindús and 18½ for Sikhs, but if Secondary education alone be considered only ½ per cent. of the Muhammadan boys of school-going age are at school, while both Sikhs and Hindús show three times this proportion. There has been however a distinct progress in the year, and the highest percentage of increase for the followers of any one religion is that shown by Muhammadans; the number of Muhammadan boys at public institutions rose by 11,000, and 4,578 passed the various public examinations, a rise of 457. The number of Muhammadan women and girls under instruction rose by 40 per cent. The special fee concessions continue to be enjoyed by Muhammadans, and there are Victoria scholarships in all parts of the Province for their encouragement.

Education of Native Chiefs.

203. The number of pupils at the Aitchison College remained at 71, but the proportion reading in the Government College and in the High and Upper Primary Departments increased, while at the Middle stage there were fewer and none at all in the Lower Primary Department. Of the candidates for

the diploma 50 per cent. were successful, and in the Matriculation Examination all passed. Excluding the case of a boy who was readmitted, the average age of admission was only 11, which is a promising feature. The teaching of Revenue law is the only important addition to the curriculum. Religious instruction continues to be a part of the school course, and is now given in school hours, a plan which is working well and an improvement on the old arrangement. The attempt to make the boys speak English at an early age has proved fairly successful, and it is hoped that in a year or two the standard of spoken English will be materially improved. The College was visited on October 27th, 1905, by His Excellency Lord Curzon, and on November 30th in the same year by His Royal Highness the Prince of Wales.

Private Schools.

204. There is a continued decrease in the numbers and attendance of those unrecognised schools which do not conform to the Departmental or University standards or submit to any public test. This is not to be regretted as there has been a satisfactory increase in the number of schools examined for grants. Lande Mahájani Schools, which teach a script widely used in commercial transactions, continue to be popular with the money-lending and mercantile classes in certain districts, and such schools are encouraged by the Education Department.

Education in Native States.

205. The Colleges in Native States are as in last year those at Patiála Baháwalpur and Kapurthala, the first of which maintains a separate Oriental sile Public schools number 244, two more than last year. The number of pupils in both Colleges and Schools increased, especially in Secondary Anglo-Vernacular Schools. The number of ordinary Indigenous Schools has fallen considerably; but the number of *advanced* Indigenous Schools has risen. Only one candidate passed the B. A. Examination. The results of the Intermediate Examinations, though poor, compare rather favourably with those of last year; but those of the Matriculation Examination were worse even than last year, and there was no candidate on the Oriental side. The Vernacular Middle School Examination results show some slight improvement. Good results have been produced by the deputation of an Assistant Inspector to Patiála, and great educational activity is being displayed in Baháwalpur. In all States much has been done to raise the Colleges to a standard that will satisfy the new requirements of the University.

Discipline.

206. Religious teaching is obligatory in all denominational and Mission schools. In the secondary departments of almost all recognised Public Schools and in Colleges, Teachers' Associations, Students' Literary Clubs and Debating Societies are maintained. Teachers' Associations are doing useful work in improving the discipline and moral tone of schools, but there is still much room for improvement. Physical training is compulsory in all Government Board and Aided Institutions for boys. Cricket and Football continue to be popular and Tennis and Hockey are now played in some places. Circle tournaments are now held in all circles. Empire Day was this year celebrated throughout the Province. Arrangements are being made for an enquiry as to the eye-sight of all students in Government institutions.

Boarding-houses.

207. There were 301 Boarding-houses (an increase of 8) with over 12,600 residents, of which 25 are for girls. Government maintains in connection with its Arts College at Lahore, its training institutions and its High Schools 43 Boarding-houses, and Local Bodies maintain 153. While many improvements have been made, there remain many Boarding-houses in which the accommodation provided is unsuitable and there are few which have a proper reading-room attached. But the Province maintains its supremacy in the recognition of the principle that a well supervised Boarding-house is a necessary adjunct to every good school, and the proportion of Boarding-houses to Secondary schools is much above the average.

Educational Conference.

208. One result of the Educational Conference held during the year is the opening of commercial classes in certain High Schools, and evening continuation classes at the Central Training College. It is thought that the time has not yet

arrived when the Punjab may have a Central Commercial Institute as recommended by the conference. Most of the recommendations of the Conferences on Female Education and Departmental affairs are under consideration. Those relating to text-books have been referred to the Text-Book Committee, while others concerning changes in the scheme of studies, the revision of standard of examination of Indigenous Schools, exemption from payment of fees of village menials, &c., have already been approved.

55. Literature and the Press.

Literature.

209. There were 1,959 books and periodicals published in the Punjab in 1905, an increase of 30 per cent. Urdu as usual is the language most used, with 881; Panjábi follows with 514 and English (158) is third. Of the whole number 236 were periodicals, an increase of 84. Religion continues to be the dominating force in literature, as, apart from books classed as religious, most poetical works deal with religion in some aspect. There are a few interesting contributions to theology, among which may be mentioned the Sunan Ab-i-Daud ma' Hashia-i-Aun-ul-Ma'bud, a large work on Muhammadan philosophy, and the lectures on Sikhism by Bhái Sardúl Singh. At the same time the work of translating the sacred writings of the various religions into the vulgar tongues is carried on in the Arsh Granthvali series and the Panjábi Qurán of M. Fíroz-ud-dín of Daska. An important phase of Western thought is represented in the translation under the name of the Wisál-i-Bári of Trine's "In tune with the Infinite." Two more volumes have been added by M. Zaka Ulla to his history of the reign of Queen Victoria, and a valuable translation has been made of the introduction of Ibn Khulladun's History of the Arabs and of the Moslem dynasties of Northern Africa. The popularity of the novel continues to increase, and though the best are translations or adaptions of foreign works, original effort is showing some improvement. The "Lakshmi" is a powerful story of the tyrannies of the Muhammadan Governors of Kashmir and their overthrow by Ranjít Singh. A charming poem in Panjábi is "Ráni Ráj Kaur da Warláp," a touching lament on the death of Rája Súrat Singh. Of periodicals the "Taraqqi", a literary scientific and religious journal published under Christian auspices, is issuing the religious part separately, a step which should widen its sphere of usefulness. The Punjab Education Journal edited by the Reverend Mr. Hildesley of Sanáwar is a new monthly, and a new quarterly journal in the Vernacular has been started entitled the Khálsa Young Men's Magazine.

Newspapers.

10. There were 260 newspapers published in the Punjab during the year 1905; of these 46 were published in English, 192 in Urdu, 1 in Urdu-Arabic, 1 in Hindi and Urdu, 9 in Hindi and 11 in Gurmukhi (Panjábi). Five English and 45 vernacular newspapers were started and 4 English and 45 vernacular ceased to exist during the year, leaving a total of 211 on the register. One paper was published half-yearly, 1 quarterly, 107 monthly, 28 twice a month, 3 three times a month, 106 weekly, 4 twice a week and 3 thrice a week. There were 7 daily papers. There were no Press prosecutions during the year under report.

56. Literary Societies.

211. [See Report for 1901-02. The subject will not be dealt with again till 1911-12.]

57. Arts and Sciences.

212. Great progress has been made during the year in all branches of the Lahore museum. The buildings have been greatly improved in accordance with the designs of the Curator, and many additions have been made to the collection of antiquities, notably a series of 125 pieces of Græco-Bhuddist

sculptures which by the generosity of the Madras Government has been transferred to this museum from that of Madras. Great progress has been made in the classification and arrangement of the exhibits, and the scheme for illustrating the various art industries by means of models showing the craftsman at his trade has been extended by the completion of a model of a metal-working establishment indicating the methods employed by the blacksmith, repoussé worker, goldsmith and coppersmith. Two parallel series of enamels from Multán and Yokohama have been collected to illustrate the different methods used to obtain a somewhat similar result. The museum continues to grow in popularity, and was visited by over 315,000 people; the careful reading of the descriptions and a sensible discussion of the exhibits appear to be increasingly common. Visits to the museum by small classes of scholars under teachers are also noticed. The museum was open for ladies only on 12 days, a privilege taken advantage of by nearly 4,000. It was visited by Her Royal Highness the Princess of Wales on November 30th, 1905.

CHAPTER VIII.

ARCHÆOLOGY.

[Detailed information on the subject of this chapter will be found in the following publications :—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for 1905-06; Annual Progress Reports of the Archæological Survey, Punjab and United Provinces Circle, for the year ending 31st March 1906.]

58. Archæology.

Hindu and Buddhist monuments.

213. Great damage has been done by the earthquake to antiquities in the Kángra district. The fort and temples of Kot Kángra are completely destroyed, as is also that of Sidh Náth and Baij Náth. The larger temple at Baij Náth with its famous Saiada inscriptions is however still standing. No damage to ancient buildings has occurred in Chamba city, but there has been much in the valley of the Rávi. Proposals have been made for the restoration where practicable of monuments injured by the earthquake. A number of fresh inscriptions have been discovered in Chamba, and a Buddhist *stupa* at Chaitru in Kángra, the first monument of the kind found in the district. The publication of the numerous inscriptions discovered in Chamba during the last three years is in progress.

Modern monuments and restoration.

214. Two life size stone elephants in black marble were erected at the Delhi gate of the fort at Delhi, from the model sculptured by Mr. Mackenzie. The restoration of the Hayát Bakhsh garden in the same fort was in progress. The statue of John Nicholson by Mr. Brock was erected in the Nicholson garden at Delhi. Near Lahore, the tiled floors of Jehángír's tomb at Shahdara were restored, and the minarets which had been badly shaken by the earthquake were rebuilt.

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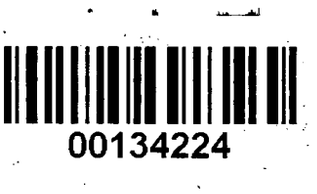
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